# *"A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."*

***Dissertation***

**Submitted to the**

**Faculty of Nursing**

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES, BHOPAL**

***In partial fulfilment of the requirement for the degree of***

***M.Sc. in Paediatric Child Health (Paediatric) Nursing***

By


***Mrs. Priya Kadiyan***

**Enrollment No: 2200043N07P76003**


Under the guidance of

***Dr. Mamta Verma***

***Associate Professor***

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**July 2024**

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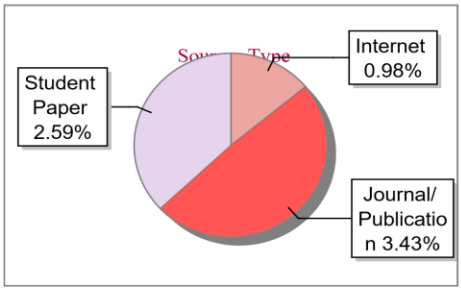


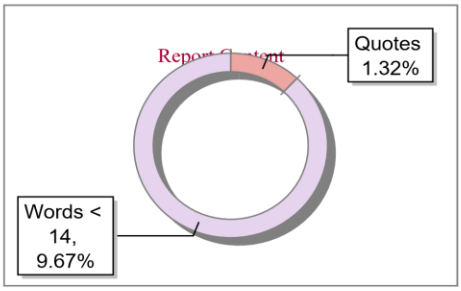


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AIIMS, Bhopal Institutional Human Ethics Committee- Student Research (IHEC-SR) in its 7th meeting held on 22nd February 2023 discussed your proposal titled **"A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."**" and evaluated it for suitability for your dissertation as required for fulfilment of MSc (Nursing).

**Following members attended the meeting:**

1. Prof. D. K. Pal, Former HoD Community Medicine, GMC, Bhopal……Chairperson
2. Prof. Rajnish Joshi, Professor of General Medicine, AIIMS, Bhopal……Member
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8. Mr. Trivesh Goswami, Law Officer, AIIMS Bhopal,……..Member
9. Dr. Shashank Purwar, Professor of Microbiology, AIIMS, Bhopal……Member Secretary

**The decision of the committee is as follows:**

The AIIMS, Bhopal IHEC-SR approves your research protocol. All research related activities must begin only after the date of this approval. The validity of this approval is till two years from the date of issuance. Please submit a closure report / renewal request before expiration of the validity for this approval.

Shashank Purwar

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**Member Secretary, AIIMS Bhopal IHEC-SR**
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"Appreciation can make a day, even change a life. Your willingness to put it into words is all that is necessary."

**-Margaret Cousins**

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Priya

Date:

Place:

# ABSTRACT

## Introduction

Initiating a child's journey with the unparalleled benefits of exclusive breastfeeding sets the foundation for optimal growth, development, and health. The fact that very less babies are fed only breast milk is a major concern all around the world. Less than half of newborns under 6 months old are exclusively breastfed, despite WHO recommendations. In India there is still a low prevalence of exclusive breastfeeding, which may be due to numerous factors. In the light of this, the present study aimed to assess the rate of non-compliance towards exclusive breastfeeding and factors related to non-compliance of exclusive breastfeeding.

## Methods

A descriptive study was undertaken among 245 mothers with children aged 6 months to 2 years at All India Institute of Medical Sciences (AIIMS), Bhopal, utilizing convenient sampling and a self-structured tool for data collection through face-to-face interview. Factors associated with non-compliance towards exclusive breastfeeding were identified using logistic regression analysis.

## Result

The findings of the study showed that, of the 245 mothers, only 122 demonstrated compliance with exclusive breastfeeding, and the remaining 123 did not feed exclusively for six mothers for a variety of reasons. Majority of the mothers strongly agreed that they didn't breastfeed because they had insufficient milk supply. Moreover, there was a significant association between non-compliance with exclusive breastfeeding and selected sociodemographic and clinical characteristics.

## Conclusion

The result of the study suggested that there is still almost half mothers not breastfeeding their child which was due to various reasons like child not gaining adequate weight, insufficient milk supply and many more. So, decision makers in health policy should find the common factors hindering the process of exclusive breastfeeding and support EBF despite the challenges in its implementation.

## Keywords

Non-compliance, associated factors, exclusive breastfeeding, mothers.

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| 11. | Participant Information sheet (English) |
| 12. | Participant Information sheet (Hindi) |
| 13. | Informed consent sheet (Hindi and English) |
| 14. | Master data sheet |

# LIST OF ABBREVIATIONS

| S.NO | ABBREVIATIONS | EXPANSION |
|---|---|---|
| **1.** | AIIMS | All India Institute of Medical Sciences |
| **2.** | CVI | Content Validity Index |
| **3.** | f | Frequency |
| **4.** | HOD | Head of Department |
| **5.** | IHEC-SR | Institutional Human Ethics Committee- Student Research |
| **6.** | EBF | Exclusive Breastfeeding |
| **7.** | LOP | Letter of Permission |
| **8.** | M.Sc. | Masters of Sciences |
| **9.** | N | Sample Size |
| **10.** | OR | Odds Ratio |
| **11.** | OPD | Outpatient Department |
| **12.** | PG | Post Graduate |
| **13.** | SCVI | Scale Content Validity Index |

# LIST OF SYMBOLS

| S.NO | SYMBOLS | EXPANSION |
|---|---|---|
| **1.** | % | Percentage |
| **2.** | > | More than |
| **3.** | < | Less than |
| **4.** | ≥ | Equal to or more than |
| **5.** | H0 | Null Hypotheses |
| **6.** | H1 | Research Hypotheses |
| **7.** | p | Level of significance |
| **8.** | df | Degree of freedom |
| **9.** | & | And |
| **10.** | = | Equal to |

# CHAPTER- I
# INTRODUCTION

# CHAPTER-1

***Breastfeeding from the first hour of birth: What works and what hurts***

***Here's what it takes to make sure mothers have a supportive environment for early and continuous breastfeeding.***

***-by Leah Selim***

## Background of the study

Breastfeeding is an innate and invaluable gift bestowed upon infants by the mother. Commencing a child's developmental path with the unmatched advantages of exclusive breastfeeding establishes the cornerstone for optimal health. Mothers, despite possessing sufficient knowledge about the importance and recommended duration of exclusive breastfeeding (EBF), still encounter challenges in adhering to it. Therefore, it is crucial to actively explore and address the obstacles faced by mothers in feeding their children.

One of the best strategies to guarantee a child's health and survival is to breastfeed them.[1] Less than half of newborns under 6 months old are exclusively breastfed, despite World Health Organization (WHO) recommendations. WHO works to raise the percentage of EBF during the first six months of a child's life to at least 50% by 2025.[2] Breast milk is the healthiest nutritional source for newborns and early children.[1] It is secure, cost free, hygienic, readily available and loaded with antibodies that help fend off a host of common child ailments.[2]

Moreover, breastfeeding enhances the maternal bond with the child[3] and reduces the risk of infant mortality and morbidity[4]. It additionally safeguards mothers by preventing breast

cancer, enhancing inter-gestational intervals, and potentially lowering the risk of diabetes and ovarian cancer[5].

Research indicates that in low- and middle-income countries, exclusively breastfed infants exhibit a 13% lower risk of mortality compared to their non-exclusively breastfed counterparts[5]. Despite the myriad benefits and numerous interventions aimed at promoting EBF, its prevalence remains unacceptably low globally and exhibits significant variations within and between countries. According to the 2018 WHO report, the global prevalence of exclusive breastfeeding is only 40%.[6] A subsequent 2019 UNICEF report revealed that approximately 44% of children worldwide were exclusively breastfed, with Asian countries reporting a slightly higher prevalence at 57%[7].

In India, EBF rates for infants under six months have shown positive progress, rising from 65 percent in 2015-16 National Family Health Survey (NFHS 4) to 76 percent in 2019-21 (NFHS 5).[6] Furthermore, regional discrepancies persist in exclusive breastfeeding practices. Chhattisgarh recorded the highest prevalence at 77.2%, while Meghalaya reported the lowest at 35.8%.[5]

The NFHS 5 indicates that in Madhya Pradesh, the percentage of children under 6 months who exclusively breastfed increased from 58.2% in 2016 to 74.0% in 2022. It also reveals that the rural areas experienced a substantial growth, with rates reaching 75.2%, while urban areas showed a slightly lower rate of 68.8% during the same period.[8]

Various research studies states that the shorter duration of breastfeeding is linked to various factors, such as the socioeconomic status of the family, delayed initiation of breastfeeding within the first hour of life, and limited accessibility to education[9,10] A commonly reported obstacle to exclusive breastfeeding (EBF) in numerous studies and cases is insufficient breast milk production.[11,12]

Additional factors influencing exclusive breastfeeding include the frequency of maternity visits, prenatal counselling, guidance from healthcare providers, early nutritional support, the timing of breastfeeding initiation, and the method of delivery.[13,14,15]

Many nations have made good progress in encouraging more mothers to breastfeed their children exclusively across the last ten years. However, if we ensure that breastfeeding is supported and protected, we can perform even better.

**Need of the study**

Breastfeeding emerges as the optimal way for nourishing infants during the initial six months of life by prominent international organizations such as the World Health Organization (WHO) and United Nations International Children's Emergency Fund (UNICEF). These organizations have meticulously formulated diverse guidelines and strategies to foster infant and young child feeding practices globally.[1]

The WHO estimates that nearly 820,000 children could be saved annually through the promotion of exclusive breastfeeding[2]. This practice plays a pivotal role in reducing infant mortality and morbidity by fostering proper immune development and providing protection against common childhood ailments such as diarrhoea, gastrointestinal infections, pneumonia, and allergies.[1,2]

Despite a high neonatal mortality rate (32 deaths per 1000 live births), the prevalence of EBF for children under six months in India was 55% in 2016, with a mere 9% increase from 2005 to 2015. In India, over 50% of newborns encounter delayed initiation of breastfeeding, and a majority of infants, around 63%, are not exclusively breastfed before the age of six months.[6]

Several research studies indicate that 35% of infants globally receive exclusive breastfeeding during the initial four months, and the percentage drops to 23.2% by the sixth month, according to findings from a study conducted by Dinesh Dharel and colleagues.[10]

The fact that not many babies are only fed breast milk is a concern all around the world.[18] Elevating breastfeeding practices to nearly universal levels have the potential to prevent 823,000 annual deaths in children under five and reduce breast cancer-related fatalities by 20,000 each year.[5]

Over the past ten years, there has been a notable and impressive increase of 10 percentage points in the global prevalence of exclusive breastfeeding, reaching a significant 48 percent. However, to reach the global 2030 target of 70 percent, the barriers women and families face to achieve their breastfeeding goals must be addressed.[3]

In a systematic review, several barriers to exclusive breastfeeding (EBF) were pinpointed, including higher maternal education in urban areas, inadequate maternity leave (less than three months), and maternal HIV-positive status. Notable obstacles also comprised inadequate breastmilk production, healthcare worker endorsement of complementary feeding, single marital status, and infant admission to neonatal intensive care units. Additionally, challenges like the lack of family support, experience of partner violence, and pressure from a partner desiring more children were identified.[16]

It's essential to highlight that while numerous studies have explored the prevalence, knowledge, and practices of exclusive breastfeeding, there is a noticeable dearth of research focusing on the factors impeding exclusive breastfeeding. In light of this gap, the current research study aims to assess non-compliance and identify associated factors hindering exclusive breastfeeding. Unlike the majority of previous studies that primarily

examined sociodemographic factors linked to non-compliance, our research intends to broaden the scope by investigating a spectrum of factors which may contribute to an increase in the prevalence of breastfeeding in the future, by actively engaging in social movements that involve both mothers and infants, and promoting rooming-in practices. Moreover, the present study aspires to pave the way for a more comprehensive understanding of the challenges faced by breastfeeding mothers and facilitate future efforts to bolster breastfeeding rates.

**Research Problem**

"A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."

**Objectives of the study**

1. To assess the non-compliance by mothers towards exclusive breast feeding.
2. To assess the factors associated with non-compliance towards exclusive breastfeeding.
3. To find out the association between non-compliance towards exclusive breastfeeding among mothers with selected socio-demographic and clinical variables.

**Research Question**

1) What is the prevalence of non-compliance by mothers towards exclusive breastfeeding.
2) What are the associated factors responsible for non-compliance towards exclusive breastfeeding?
3) Is there any association between non-compliance towards exclusive breastfeeding among mothers with selected socio-demographic and clinical variables.

**Hypothesis**

H0- There is no association between non-compliance towards exclusive breastfeeding among mothers with selected socio-demographic and clinical variables.

H1- There will be a significant association between non-compliance towards exclusive breastfeeding among mothers with selected socio-demographic and clinical variables with 0.05 level of significance.

**Assumption**

Factors associated with non-compliance towards exclusive-breastfeeding may differ from mother to mother.

**Operational definition**

1) EXCLUSIVE BREASTFEEDING – In this study exclusive breastfeeding refers to providing infant only breast milk by mother or expressed breast milk for continuous 6

months and no additional food or drink, with exception of drops or syrups consisting of vitamins, mineral supplements or medicines.

2) NON- COMPLIANCE- In this study, patient non-compliance describes the degree to which non-adherence to exclusive breastfeeding is followed for less than 6 months by the mothers.

3) FACTORS RELATED TO NON-COMPLIANCE - In this study factor means factors which are responsible for non-adherence of breastfeeding among mothers. It includes maternal factors, infant factors and socio-cultural factors.

4) MOTHERS- In this study, the mothers indicate mothers who's child is in age group of 6 months to 2 years.

**Delimitation**

The study is delimited to AIIMS Bhopal.

**Conceptual framework**

According to Polite and Hunger (1995), a conceptual framework is a group of linked concepts or abstractions that are logically arranged around a similar topic.[17]

A conceptual framework of factors affecting breastfeeding practices by Debra J Hector[18]

In 2005, Debra J Hector developed a conceptual framework for understanding the influences on breastfeeding that incorporates a variety of elements of relevant theories and models such as 'Ecological Model' and 'Ottawa Charter for Health Promotion'.

The conceptual framework (Figure 1) proposes three levels of factors that influence breastfeeding practices: individual, group and society. The framework can be used to generate hypotheses about factors affecting breastfeeding and the types of interventions that might be used to address them.

1. **Individual level factors:** These factors relate directly to the mother, infant, and the 'mother-infant dyad'. It includes the mother's intention to breastfeed, knowledge, skills, birth experience, health and risk status of mother and infant. Each can directly influence the initiation and duration of breastfeeding, and are frequently correlated with social and demographic variables.
2. **Group level factors:** It includes attributes of the environment, having a direct influence on mothers and infants, these are as follows:

i. The hospital and health care environment: It consists of practises and procedures such as rooming in, skin to skin contact and professional support with breastfeeding.

ii. Home and peer environment: In this the physical and social factors such as size of household, parity, family circumstances, partner attitudes and supports, peer support are included.

iii. The work environment: It include factors influencing mother's ability to combine work and breastfeeding such as work hours and flexibility facilities, policy that enable own site expressing and storing of breast milk.

iv. The community environment: It includes various breastfeeding policies and norms for example parenting rooms in shopping centres, transport and resutrants.

v. The public policy environment: It includes benefits such as maternity and paternity leave, child care allowance and health insurance. All these have a significant impact on the hospital, work and home environment.

3. **Societal level factors:** these includes cultural norms regarding breastfeeding such as support for breastfeeding mothers, the extent to which exposing breasts for feeding is complicated by cultural norms regarding sexuality; and the economic importance of products such as breastmilk substitutes and complementary foods.

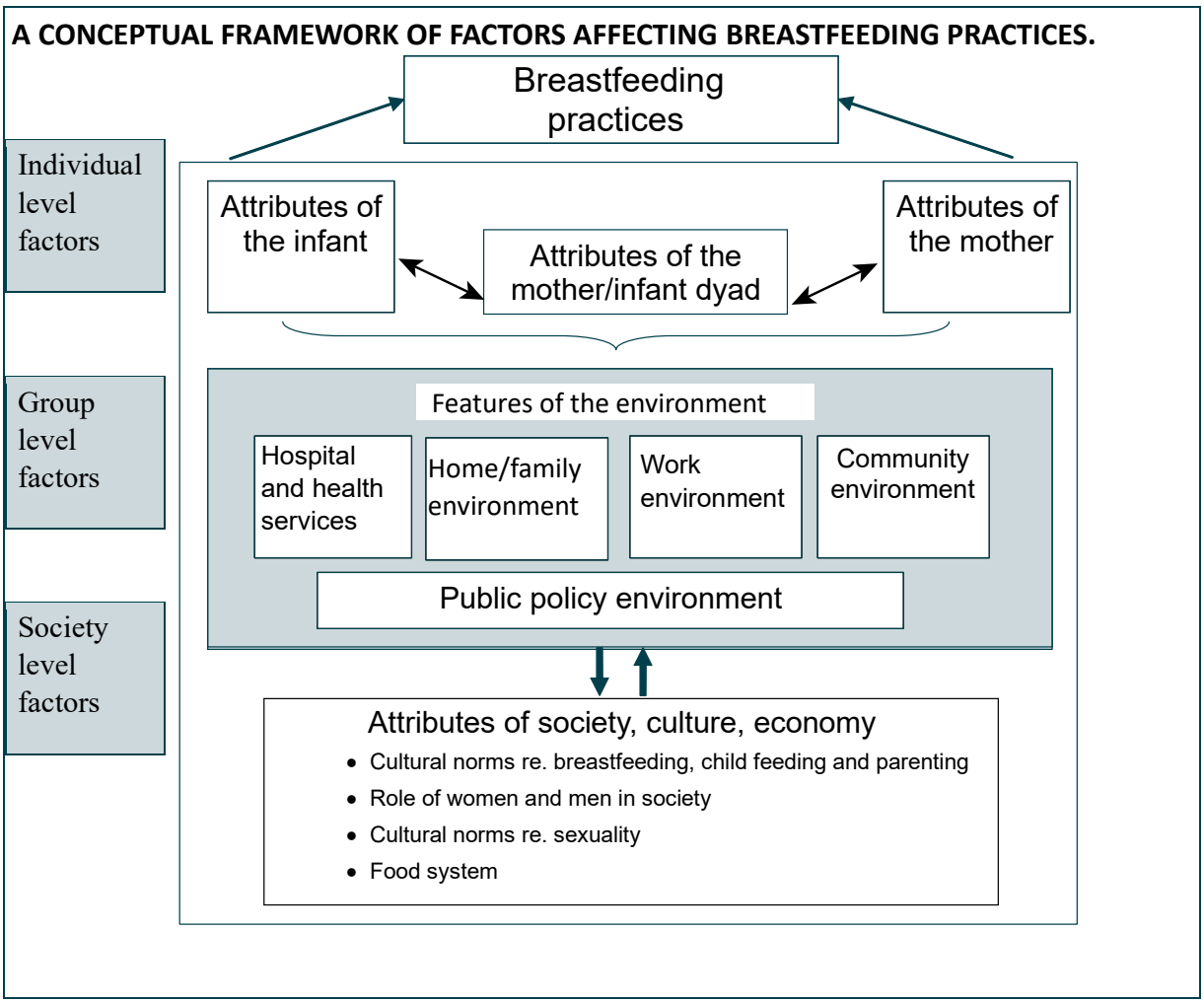


**Fig 1 represents the conceptual framework of factors affecting breastfeeding practices proposed by Debra J Hector (2005)[18]**

## Constructs for the study

The following constructs of the factors affecting breastfeeding practices proposed by Debra J Hector model are proposed by the researcher according to this study:

1. **Individual level factors:** In this study, individual factors include sociodemographic and clinical data of mothers and infants, along with maternal and infant factors hindering exclusive breastfeeding (EBF). These factors directly affect breastfeeding initiation and duration, often showing correlations with social and demographic variables. Further mother/child dyad includes limited interaction Between mother and child due to NICU admission or being with grandparents.
2. **Group level factors:** In this study, it encompasses environmental attributes directly influencing mothers and infants, including the following.
    - The hospital and health care environment: it consists of unsupportive hospital environment, such as lack of support and advice regarding EBF by hospital staff.
    - Home and peer environment: it includes parity, type of family and various factors affecting EBF such as family disputes, lack of encouragement from husband and family members.
    - The work environment: it includes type of occupation and discontinuing breastfeed because of returning back to work especially in private sector.
3. **Societal level factors:** This study includes societal and cultural attitudes towards breastfeeding, such as the perception of colostrum as 'bad milk,' societal discomfort with public breastfeeding, and the belief in the efficacy of formula milk for a baby's growth and development as portrayed in advertisements.

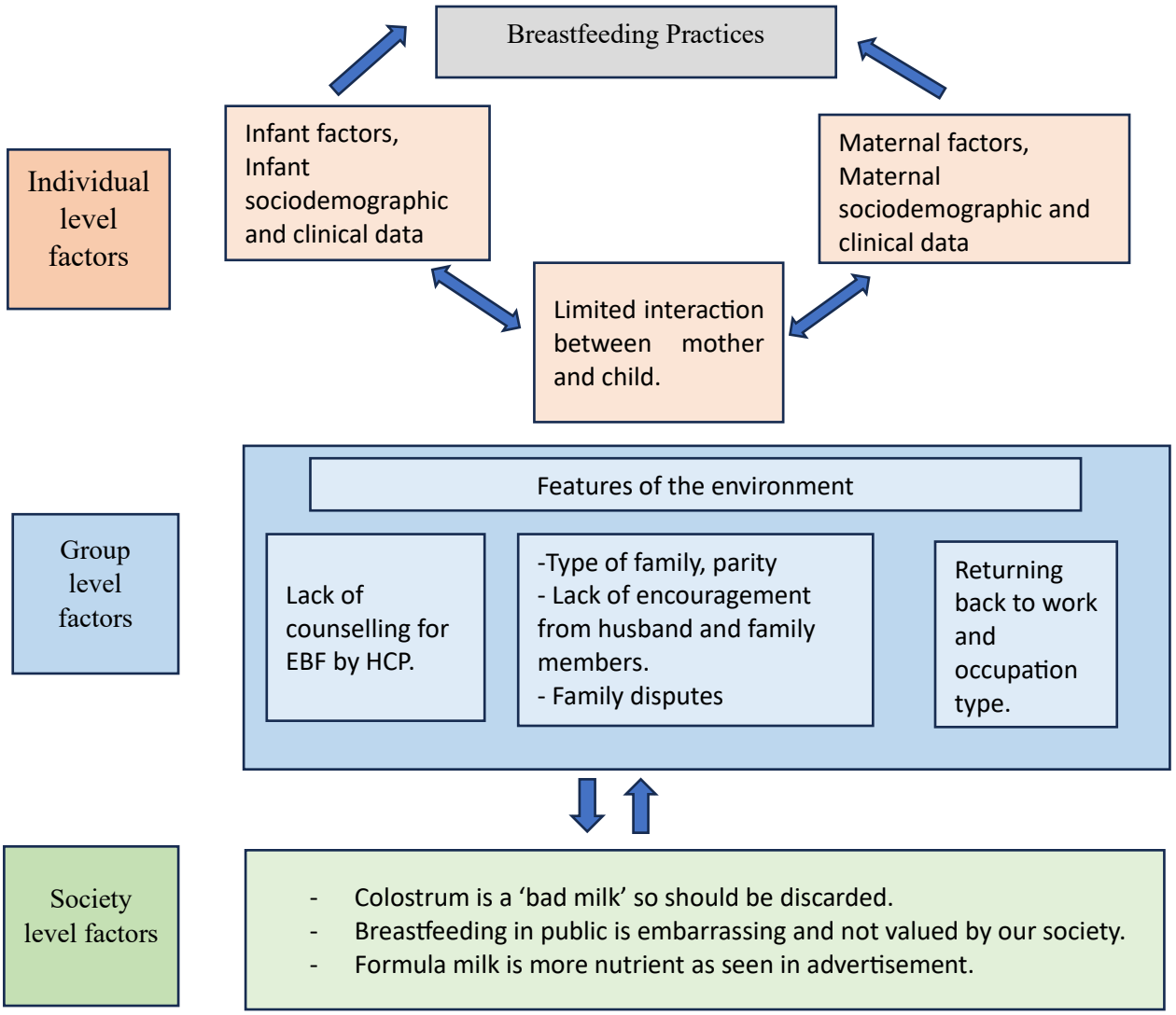
Breastfeeding Practices
Individual level factors
Infant factors, Infant sociodemographic and clinical data
Maternal factors, Maternal sociodemographic and clinical data
Limited interaction between mother and child.
Group level factors
Features of the environment
Lack of counselling for EBF by HCP.
-Type of family, parity
- Lack of encouragement from husband and family members.
- Family disputes
Returning back to work and occupation type.
Society level factors
- Colostrum is a 'bad milk' so should be discarded.
- Breastfeeding in public is embarrassing and not valued by our society.
- Formula milk is more nutrient as seen in advertisement.

**Fig 2 represents conceptual framework of factors affecting exclusive breastfeeding among mothers (adapted from hector et al. 2005)**

## Summary

The study's background, need, problem statement, objectives, questions, assumptions, hypotheses, operational definitions, delimitations, and conceptual framework are all covered in this chapter.

# CHAPTER II
# REVIEW OF LITERATURE

# CHAPTER II
# REVIEW OF LITERATURE

A literature review entails summarizing the existing body of work and research conducted by recognized scholars on a specific research topic.[19] The review incorporates a thorough exploration using various search engines such as PubMed, Scopus, ResearchGate, Google Scholar, etc., employing specific keywords like compliance, non-compliance, prevalence, hindering factors to conduct an in-depth literature search.

As a result, an extensive review of the literature was conducted, and extracts relevant to the present study were compiled and presented within the specified thematic areas.

1) Literature related to prevalence of compliance and non-compliance towards exclusive breastfeeding.
2) Literature related to factors influencing exclusive breastfeeding.
3) Literature related to factors associated with non-compliance towards exclusive breastfeeding.

## 1) Literature related to prevalence of compliance and non-compliance towards exclusive breastfeeding.

An ambispective community-based observational study was carried out in 2022 within a rural population of PHC South India, involving 441 mothers with aim to determine the prevalence of exclusive breastfeeding. Mothers with infants aged less than one year were interviewed using a structured questionnaire through recall response method.

Approximately 13.8% of mothers adhered to exclusive breastfeeding for a duration of 4 months and nearly 70% of mothers sustained EBF for six months or longer.[19]

Secondary analysis of data from the National Family Health Survey (NFHS-4), which was conducted during the period 2015–2016 and prevalence of exclusive breastfeeding of children below 6 months among various regions of India was identified. Approximately 55% of children aged 0–5 months in India were exclusively breastfed, with the Northeastern regions exhibiting the highest prevalence at 61.7%, and the Central region the lowest at 50.5%. Uttar Pradesh reported the highest prevalence, while Lakshadweep had the lowest. State-wise exclusive breastfeeding rates showed significant variations between the most advantaged (Urban Secondary Rich Hindu) and disadvantaged groups (Rural Primary Poor Others). [20]

A cross-sectional observational study was conducted in 2018 in Brazil to evaluate the prevalence of exclusive breastfeeding and to identify factors influencing the lack of adherence to exclusive breastfeeding for 6 months and total breastfeeding for 2 years. Breastfeeding within first hour of birth was reported by 57.14% mothers and Exclusive breastfeeding for 6 months or longer was reported by 38.44% of mothers, while breastfeeding for 2 years or more was reported by 22.6% of mothers.[21]

A cross-sectional study conducted from October 2018 to October 2019 in Chengalpattu, and Kanchipuram district of southern Chennai for evaluating exclusive breastfeeding prevalence and barriers using systematic questioning with 252 mothers and children aged 6 to 9 months. The study revealed an exclusive breastfeeding prevalence of 73.01%.[22]

A descriptive cross-sectional study was conducted in Nigeria with a sample of 350 mothers. The study assessed breastfeeding practices by measuring the duration of

exclusive breastfeeding, Mothers were queried about when water, formula, herbs, or foods were introduced to their infants. The results indicated that on average, exclusive breastfeeding was practiced for 3 months, with only 24.1% adhering to the recommended duration of 6 months.[23]

A cross-sectional survey conducted from February 2018 to April 2018 was carried out at Primary Health Care Centers in Jazan City, South-Western Saudi Arabia, it included all mothers attending the PHC centers during this period. 66.7% of mothers practiced exclusive breastfeeding during the first six months of the child's life, and only 28.9% continued exclusive breastfeeding for six months.[24]

The study under consideration draws upon the rich dataset of the 2015–2016 India National Family Health Survey, encompassing a total weighted sample of 21,352 women aged 15–49 years with children under the age of 5 months who received breast milk as the only source of nourishment, based on mother’s recall on feeds given to the infant 24 h before the survey. One key finding of the study is the regional variability in the prevalence of EBF among infants. The Southern region emerged with the highest prevalence, recording an impressive 79.2% adherence to exclusive breastfeeding practices. In contrast, the North-Eastern region exhibited a comparatively lower prevalence of 68.0%.[25]

In a descriptive study conducted from January to June 2022 in Pakistan, with an objective to assess the prevalence and factors influencing non-compliance with exclusive breastfeeding among 224 breastfeeding mothers at the Paediatric Outpatient Department (OPD) in Dadu District Hospital. The findings revealed that only 29.5% of mothers adhered to exclusive breastfeeding, while 70.5% opted for a combination of formula feeding and breastfeeding[26]

A mixed method study conducted from 2019 to 2020 in Yaoundé, Cameroon aimed at evaluating adherence and identifying determinants that influence the duration of exclusive breastfeeding (EBF) among 503 nursing mothers. This study revealed that more than 90% of mothers were aware about the importance of compliance with EBF. However, despite this high awareness, only 38% of the mothers practiced exclusive breastfeeding and other 62% faced challenges in adhering to EBF recommendations.[27]

A cross-sectional descriptive study conducted from April to November 2016 among Chinese-born and native Spanish to assess adherence to initial exclusive breastfeeding between 2 group ,33 Chinese-born and 40 native Spanish women. Indigenous Spanish women displayed a notably higher occurrence of exclusive breastfeeding (80%) compared to Chinese-born immigrant women, who exhibited a significantly lower prevalence at 36.4%.[28]

A cohort study conducted between January 2011 and March 2014 in Japan among 80,491 mothers with an aim to assess the success or failure to exclusively breastfeed. The result indicated that approximately 37.4% of the participating mothers were able to exclusively breastfeed their infants for the entire first 6 months of life.[29]

A mixed-method study was carried out in Indonesia between August and September 2021, involving 156 breastfeeding mothers. The findings revealed that out of the 156 participants, 97 mothers (62.2%) reported exclusive breastfeeding for their infants.[30]

**2) Literature related to factors influencing exclusive breastfeeding.**

An ambispective community-based observational study was carried out within a rural population of PHC, in 2022 involving 441 mothers. Mothers with infants aged less than

one year were interviewed using a structured questionnaire through recall response method to determine the survival, prevalence and associated factors of exclusive breastfeeding practices in south India. The findings of the current study indicate a higher prevalence of Exclusive Breastfeeding (EBF) among mothers who attended a minimum of four antenatal visits, with an adjusted odds ratio (AOR) of 1.357. In this study, birth weight of the child, higher birth order of the child, lower maternal age , higher education among mothers, mothers who were housemakers was significantly associated with EBF with p value <0.05.[19]

A cohort study conducted between January 2011 and March 2014 in Japan among 80,491 mothers with an objective to assess the supporting and inhibiting factors towards exclusive breastfeeding using multiple logistic regression model to analyse the data. Early skin-to-skin contact, rooming-in and regional social capital were the highlighting factors supporting EBF.[29]

A study was conducted using mixed-method design from August 2021 and September 2021 in Indonesia. Family Support Questionnaire (FSQ) and semi-structured in-depth interviews were used for collecting quantitative and qualitative data respectively. the appraisal and informational support factor and minimal working hours were linked as important factors in achieving the successful exclusive breastfeeding practice during the COVID-19 pandemic period.[30]

A quasi- experimental study conducted between 2012 to 2014 in Netherlands with an aim to examine the effectiveness of Breastfeeding Support Programme (BSP), on duration and exclusivity of breastfeeding among its participants. This study concluded that BSP is an effective means to delay cessation of exclusive breastfeeding and therefore increase breastfeeding duration and exclusivity.The BSP aims to boost

exclusive breastfeeding for six months or more by enhancing maternal attitudes through highlighting benefits for both mother and child, then involving fathers and ensuring reliable support, and empowering mothers with information, encouragement, and practical support to improve breastfeeding skills.[31]

A qualitative study conducted in Nigeria, to explore the sociocultural beliefs and practices of rural mothers that influenced the timely initiation and practice of breastfeeding. Main themes in were exclusive breastfeeding, breastfeeding initiation, and decision-making regarding infant feeding. Result revels that Partners' awareness, family support, and opinions about the advantages of exclusive breastfeeding were found to be facilitators in the study.[32]

3) **Literature related to factors associated with non-compliance towards exclusive breastfeeding.**

A cross-sectional and observational study was undertaken in paediatric outpatient clinics in Santo André, Brazil where 385 mothers were interviewed and factors influencing the lack of adherence to exclusive breastfeeding for 6 months and total breastfeeding for 2 years were identified. Single mothers, pacifier use, delayed breastfeeding initiation, and low birth weight emerged as significant factors associated with the inadequate practice of exclusive breastfeeding for the recommended duration. Conversely, prompt breastfeeding initiation within the first hour was linked to a lower risk of non-adherence to exclusive breastfeeding for 6 months.[21]

A systematic cross-sectional study from October 2018 to October 2019 in southern Chennai, Chengalpattu, and Kanchipuram surveyed 252 mothers with children aged 6 to 9 months. Reasons for discontinuation included undisclosed issues (23.52%), sore

nipples (14.70%), breast implants (2.94%), and inadequate milk supply (58.82%). No significant associations were found between child's sex, type of delivery, breastfeeding counselling, first feeding, and exclusive breastfeeding.[22]

A quantitative descriptive cross-sectional study was carried out at Primary Health Care Centers in Jazan City, South-Western Saudi Arabia. The study spanned from February 2018 to April 2018 and included all mothers attending the Primary Health Care centers during this period. In the initial six months of the child's life, a significant correlation exists between exclusive breastfeeding and maternal breastfeeding knowledge as well as encountered barriers. Notably, 60% of mothers have received information about breastfeeding, with the majority attributing their knowledge to their mothers. Only 31.4% obtained information from hospital staff.[24]

A study utilizes the extensive dataset from the 2015–2016 India National Family Health Survey, comprising 21,352 women aged 15–49 with infants under 5 months exclusively breastfed, as reported by mothers based on a 24-hour recall prior to the survey. Across all regions, children with higher birth order categories were less likely to be exclusively breastfed compared to first-born children. In Southern India, breastfeeding practices were influenced by maternal education, with mothers having higher education and those with female children exhibiting a reduced likelihood of engaging in breastfeeding. On the other hand, mothers who live in rural parts of northern India and do not receive any prenatal visits were linked to a higher degree of non-compliance. In the Central area, mothers of Muslim descent and children born to mothers from wealthy household had lower EBF practices.[25]

A research study done during the period from January to June 2022 among 224 breastfeeding mothers at the Paediatric Outpatient Department (OPD) in Dadu District

Hospital, Pakistan to assess the factors influencing non-compliance with exclusive breastfeeding. The primary factor contributing to non-compliance with exclusive breastfeeding was the utilization of formula milk, reported by 47% of mothers, followed by insufficient breast milk at 21%, as per the study's findings.[26]

A mixed-method study by Gloria Akah Ndum Okwen et al. in Yaoundé, Cameroon, among 503 nursing mothers with the goal of assessing adherence and determining factors that affect the length of exclusive breastfeeding (EBF). It was found that married mothers were more likely to comply with EBF and mother who had attained a tertiary education were less likely to comply with EBF, with a p value of 0.003 and 0.005 respectively.[27]

A qualitative study conducted in North West Nigeria, to investigate the sociocultural beliefs and practices of rural mothers that influenced the timely initiation and practice of breastfeeding. Three main themes emerged from the analysis were exclusive breastfeeding, breastfeeding initiation, and decision-making regarding infant feeding. Pre-lacteal food and fluid introduction, insufficient family support, uvulectomy, and participants' perceptions that breast milk is insufficient for a baby were found to be obstacles to exclusive breastfeeding.[32]

Another qualitative study conducted in 2017 in Kinshasa purposively on sample of 162 (First Time Mother’s) FTMs aged 15 to 24 as well as their male partners, mothers-in-law, based on a scenario given during 14 focus group sessions. To discern prevailing themes and patterns in the participants' discussions, a thematic content analysis was conducted. The primary challenges hindering exclusive breastfeeding included the widespread belief among a majority of FTMs that exclusive breastfeeding was an

uncommon practice. Additionally, participants expressed a concern about potential negative repercussions, such as teasing and ridicule, from the decision not to give babies water during the first six months of life. and the impulse to appease influential people in their social networks, particularly their mothers and friends, by following their lead.[33]

A systematic literature review of qualitative studies on barriers and facilitators to exclusive breastfeeding practice in sub-Saharan African countries included 20 studies from which fifteen studies employed a qualitative study design; three employed a mixed-method study design, one involved a case-study and another adopted phenomenological approach. The thematic data analysis identified three themes, and eight sub-themes from 19 studies as barriers to EBF by the breastfeeding mothers. According to eight research, working mothers and rigorous schedules or workloads are obstacles to exclusive breastfeeding. Twelve studies found that a significant obstacle to EBF was perceived inadequacy of breast milk. Four studies reported that poor awareness and understanding of exclusive breastfeeding, unwanted changes in physical appearance such as sagging breasts, weight gain or weight loss affected their practice.[34]

**Research Gap:**

Despite global efforts to promote and support exclusive breastfeeding, there remains a significant gap in our understanding of the specific factors hindering its widespread practice. Upon reviewing the multiple literature from different sources, it was found, that existing studies on factors hindering exclusive breastfeeding primarily focus on individual and socio-cultural aspects, and only limited researches had examined the challenges such as, healthcare system support, marketing influences and emerging technologies on exclusive breastfeeding rates.

A more comprehensive investigation into these neglected areas is essential for designing effective interventions to enhance exclusive breastfeeding practices and improve infant health outcomes.

**Summary**

This chapter encompasses the research approach, design, setting, population, sample, pilot study, data collection procedures, and data analysis plan. Primarily, it presents an extensive literature review categorized under three main headings: literature related to the prevalence of compliance and non-compliance towards exclusive breastfeeding, literature exploring factors influencing exclusive breastfeeding, and literature examining factors associated with non-compliance towards exclusive breastfeeding. This comprehensive review sets the foundation for the current study, guiding the exploration of exclusive breastfeeding practices and associated factors.

# CHAPTER- III
# MATERIALS & METHODS

# CHAPTER-III

# MATERIALS AND METHODS

The methodology of research indicates the general pattern to gather empirical data for the problem under investigation.[35]

This chapter comprises the study methodology, research approach, research design, research variables, setting of the study, population, sample and sample size, sampling technique, criteria for selection of samples, development of tool, description of tool, technique of data collection, validity and reliability of tool, ethical consideration, pilot study, data collection procedure, and plan for data analysis. The aim of the present study was to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospitals, Bhopal, Madhya Pradesh."

**Research approach:**

The quantitative research approach was adopted for this study. The purpose of the study was to assess the non-compliance towards exclusive breastfeeding and explore factors hindering exclusive breastfeeding among mothers in selected tertiary care hospitals, Bhopal, Madhya Pradesh."

**Research design:**

A descriptive research design was used in this study, because of its effectiveness in examining non-compliance and the factors correlated with the lack o adherence to exclusive breastfeeding among mothers.

**Research Variables:**

Research variables: Non-compliance towards exclusive breastfeeding, Factors associated with non-compliance towards exclusive breastfeeding.

Sociodemographic Variables: Mother information consists of Mother's age, marital status , religion, Mother's education and Husband's Education according to socio-economic status scale of Kuppuswamy, Mother occupation , Husband occupation , residential area , type of family, number of live children and total monthly income of the family according to socio-economic status scale of Kuppuswamy . Child information includes age of the youngest child, child' gender and weight of the child at birth,

Clinical variables: Type of pregnancy, ANC visit taken, twin delivery in last pregnancy, type of delivery, place of delivery, gestation age at the time of delivery, parity status, time of initiation of breastfeeding after delivery.

Variables assessing factors associated with non-compliance towards exclusive breastfeeding :- maternal factor, infant factors and sociocultural factors.

**Research setting:**

This study was conducted within the paediatric Outpatient Department (OPD), obstetrics and gynaecology OPD, and the immunization centre at tertiary care hospital All India Institute of Medical Sciences (AIIMS) Bhopal. AIIMS Bhopal, recognized as an institute of national importance (INIs), is located in the Bhopal district of Madhya Pradesh. As a tertiary care hospital, AIIMS Bhopal boasts a total bed count of 1108 beds. The selection of AIIMS Bhopal's well-functioning OPD and immunization centre as the study setting is justified by the substantial number of mothers visiting these facilities for routine checkups, follow-ups, vaccinations, and other healthcare services. This emphasis on maternal and child health

underscores the significance of the paediatric and obstetrics/gynaecology departments, along with the immunization centre.

**Population**

Target population = Mothers having their child in the age group of 6 months to 2 years and visiting tertiary care hospital Bhopal, MP.

Accessible population = Mothers visiting Paediatric OPD, Obstetrics and Gynaecology OPD and Immunization room of AIIMS Bhopal.

**Sample:** The study's sample comprised mothers who fulfilled the inclusion and exclusion criteria, attended the research setting the course of the study, and were available during the data collection period.

**Inclusion criteria:**

Mothers whose child is more than 6 months and less than 2 years of life.

Mothers who are present at the time of data collection.

Mothers who are able to understand Hindi or English.

Mothers who are willing to participate in the study.

**Exclusion criteria:**

Mothers in the phase of exclusive breastfeeding.

Mother having a child more than 2 year.

Mothers who's doesn't remember the time span of exclusive breast feeding.

Mothers who's child had previous congenital birth defects like cleft lip, cleft palate, TEF and metabolic disorders (phenylketonuria, galactosemia, lactose intolerance)**.**

**Sample size =** Based on previous research prevalence (19.9%)[36] was used to estimate the sample size in my study using the formula given below.

$N = Z^2 (1-\alpha/2) Pq^2 / d^2$

$n = \frac{(1.96)^2 \ X0.199X \ O.801}{0.0025}$

P=0.199

q= 1-0.199= 0.801

d= 0.05

Z=1.96

Calculated Sample Size= 244

Total Sample = 245 mothers were enrolled for the study.

**Sampling technique:** In the present study, a non-probability convenient sampling technique was opted due to its practicality and suitability for the researcher to utilize the most readily available participants.

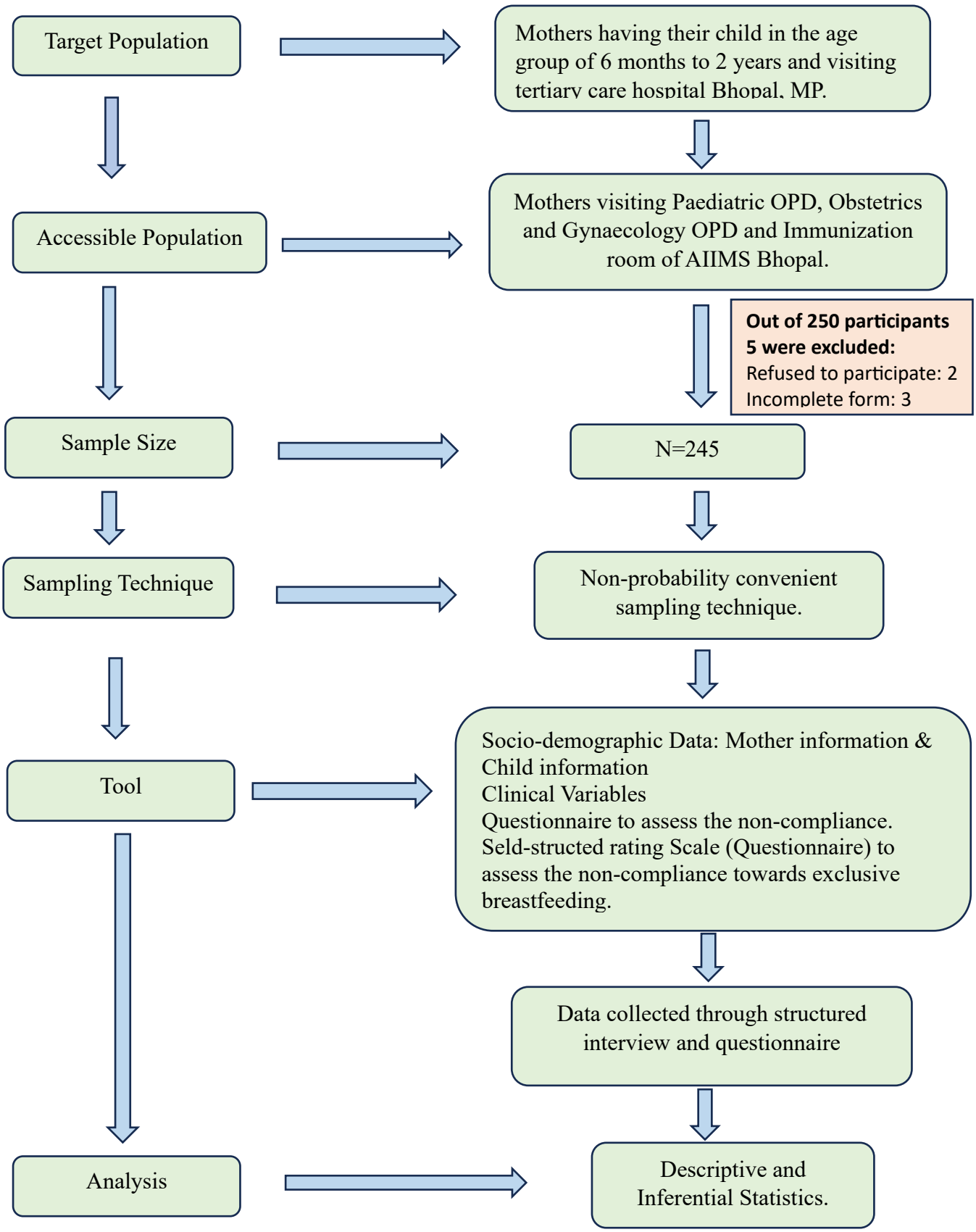
Target Population
Mothers having their child in the age group of 6 months to 2 years and visiting tertiary care hospital Bhopal, MP.
Accessible Population
Mothers visiting Paediatric OPD, Obstetrics and Gynaecology OPD and Immunization room of AIIMS Bhopal.
Out of 250 participants
5 were excluded:
Refused to participate: 2
Incomplete form: 3
Sample Size
N=245
Sampling Technique
Non-probability convenient sampling technique.
Tool
Socio-demographic Data: Mother information & Child information
Clinical Variables
Questionnaire to assess the non-compliance.
Seld-structed rating Scale (Questionnaire) to assess the non-compliance towards exclusive breastfeeding.
Data collected through structured interview and questionnaire
Analysis
Descriptive and Inferential Statistics.

**Fig 3: Schematic Representation of Descriptive Research Methodology**

**Data collection tool and instruments**

**Development and description of tool**

Following an extensive review of literature, theoretical frameworks, and the formulation of research questions, a questionnaire was developed. The tool underwent content validation by experts, and their feedback was carefully considered, leading to the incorporation of several suggested modifications. The finalized questionnaire comprised two distinct sections.

1.Review of literature on Non-compliance of EBF and factors associated with non-compliance towards exclusive breastfeeding was done using Boolean operators.

2. Preparation of the blue print of tool.

3. Preparation of the first draft of tool.

4. Personal consultation and discussion with guide and co-guide.

5.Preparation of criteria rating scale for validation of tool.

6. Content validation of the tool.

7. Modifications of the tool based on suggestions.

8. Reliability testing of the tool.

9.Preparation of the final draft of tool.

**Finalized tool for data collection includes the following contents:**

Screening tool based on inclusion and exclusion criteria. (refer to ANNEXURE 1)

Self – structured tool containing (ANNEXURE 2 & 3)

**Section A:** . Section-A consists of Part A having socio-demographic data followed by Part B having clinical variables. Part A have two subdivision**.** Part A.1 consists Mother information having 11 items which includes Mother's age, marital status , religion, Mother's education and Husband's Education according to socio-economic status scale of Kuppuswamy, Mother occupation , Husband occupation , residential area , type of family, number of live children and total monthly income of the family according to socio-economic status scale of Kuppuswamy and Part A.2 consists of Child information which contains 3 items age of the youngest child, child' gender and weight of the child at birth.

Part B encompasses clinical variables, consisting of 8 items that include details such as the type of pregnancy, antenatal care (ANC) visits taken, twin delivery in the last pregnancy, type of delivery, place of delivery, gestation age at the time of delivery, parity status, and the time of initiation of breastfeeding after delivery.

**Section B:** Comprises a questionnaire designed to assess the non-compliance towards exclusive breastfeeding in alignment with World Health Organization (WHO) guidelines.

**Section C:** Contain self structured questions to assess the factors associated with non-compliance towards exclusive breastfeeding :- maternal factor, infant factors and sociocultural factors. This section includes statements under three factors: Maternal factors involves 13 statements infant factors involves 6 statements and socio-cultural factors involves 9 statements.

**Validity and Reliability of tools (ANNEXURE 5,6 and 7)**

**Validity**: The tool was sent to 10 experts. (ANNEXURE 4) Item content validity index (I-CVI) and scale content validity index (S-CVI) was calculated. The S-CVI for Part A and Part B of Section A was 0.95 and 1, respectively. The S-CVI for Section B was 0.8, while Section D obtained a S-CVI of 0.96. Content validity of the self – structured tool was established.

Subsequently, the tool underwent translation from English to Hindi, and a back translation was conducted by language experts proficient in both languages.(ANNEXURE 8 & 9)

**Reliability**: Reliability in research denotes the degree of consistency and accuracy exhibited by an instrument in measuring the intended attribute for its designated research purpose. To establish the reliability of section C containing statements to assess the factors associated with non-compliance towards exclusive breastfeeding among mothers, tool testing was done on 25 mothers visiting Paediatric, gynaecology & obstetric OPD, Immunization room, paediatric Ward and having the child in age group of 6 months to 2 years and their response was collected. Internal consistency was calculated with split- half method using SPSS software (version 20). Split- half Correlation value (r) = 0.8561 indicating acceptable level of reliability of the tool.

**Technique of data collection**

Utilizing specific instruments for the systematic gathering of pertinent data or information is referred to as a research method for data collection. In this study, participants were selected using a screening tool based on inclusion and exclusion criteria. Self-structured questionnaire was used to collect the data. The questions were clearly and audibly read to participants, who then offered their responses, which were duly recorded.

**Ethical consideration**

Ethical clearance was taken from Institutional Human Ethics Committee IHEC-PGR of AIIMS Bhopal (LOP no: IHEC-PGR/2023/M.Sc. Nursing/Sept20). The pilot study was initiated after receiving LOP. Permission was taken from Principal-Nursing College prior to

data collection. HODs and Senior Nursing Officers in their respective departments were informed in advance before initiating the data collection process. (ANNEXURE 10).

Participants were informed about the study using participant information sheet (PIS) (ANNEXURE 11&12). Non-maleficence was upheld by obtaining informed consent from the mothers of children aged between 6 months and 2 years. (ANNEXURE 12) Anonymity of the participant was maintained by assigning code numbers for identification. No potential harm was caused to the participant. Confidentiality of the participant was maintained and there is no financial benefit involved in the study.

**Pilot study**

A pilot study is a preliminary, smaller-scale investigation conducted before the commencement of the actual main study in research. In present study pilot study was conducted in Paediatric medicine OPD, AIIMS Bhopal on 24/7/2023, 11/09/2023 and 13/9/2023 among 25 mothers after receiving permission from the medical superintendent. Participants in the study were chosen using a screening tool. After introducing oneself and building rapport, the subject was informed of the study purpose and consent was taken from them. The subject was questioned by the researcher, and the answers were noted on the questionnaire. For one patient, the entire process took 25-30 minutes. Pilot study indicated that the research was not only feasible but also served to acquaint the researcher with the study environment.

**Procedure for data collection**

After obtaining ethical clearance and permission from concerned authorities data collection was started from 18$^{th}$ September 2023 and continued up to 8 November 2023. Mothers who

participated during pilot study data collection were excluded from main data collection. All mother of children aged between 6 months – 2 years meeting inclusion were chosen carefully. The purpose of the study was explained and written informed consent was obtained from the participants. After introducing myself and building a rapport with the participants, I explained the study purpose, and each subject provided written consent. Every day, on average, 15 to 20 mothers were enrolled in the study. Afterward, I proceeded with face-to-face interviews to implement the final tool. The complete procedure for each participant took approximately 25 to 30 minutes. The collected data underwent analysis utilizing both descriptive and inferential statistics.

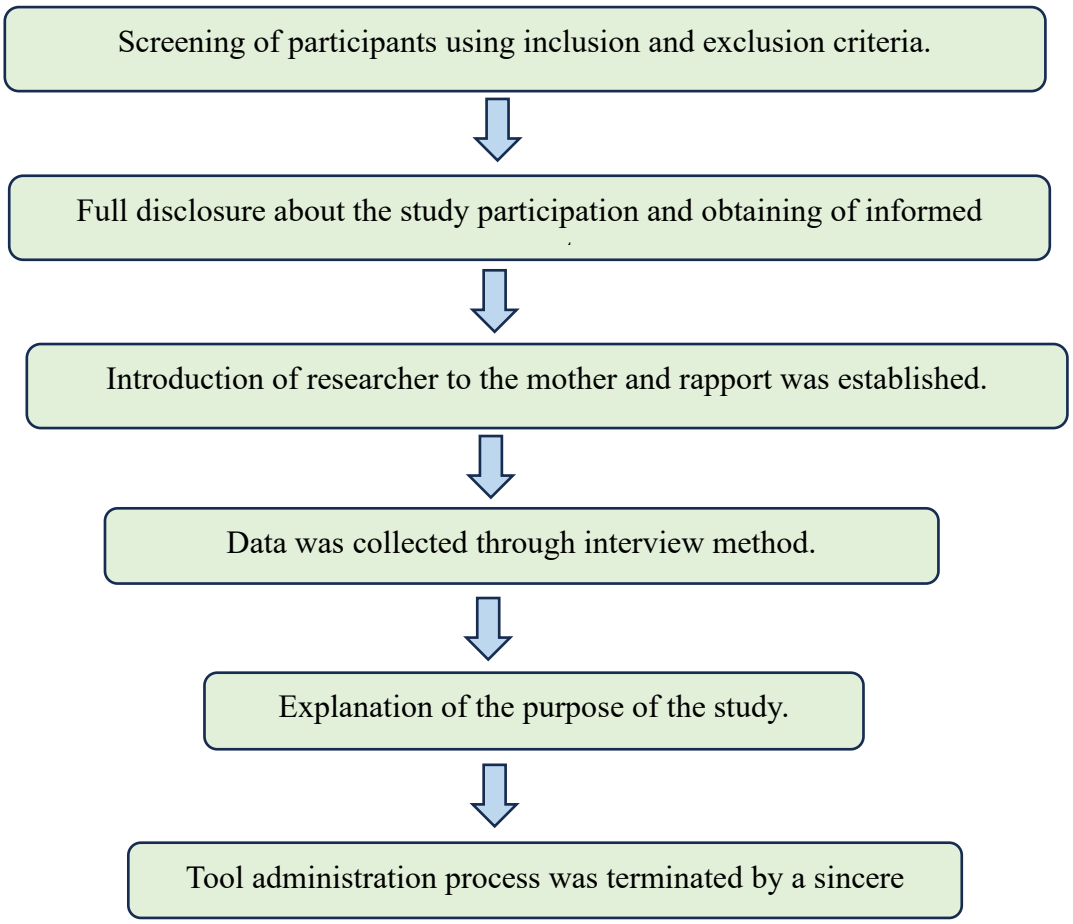
Screening of participants using inclusion and exclusion criteria.
Full disclosure about the study participation and obtaining of informed
Introduction of researcher to the mother and rapport was established.
Data was collected through interview method.
Explanation of the purpose of the study.
Tool administration process was terminated by a sincere

**Fig 4: Schematic representation of the procedure of data collection.**

**Plan for data analysis**

The data analysis plan includes both descriptive and inferential statistics. Subsequent to editing, coding, and tabulation, a master data sheet was prepared to facilitate further analysis. The data analysis process utilized IBM SPSS version 16.0.

Frequency and percentage distribution was done for analysis of distribution of such demographic and clinical variables. For assessing the prevalence of non-compliance towards exclusive breastfeeding frequency and percentage distribution was used.

Frequency percentage distribution and multivariant regression analysis was used to assess the factor associated with non-compliance towards exclusive breastfeeding.

Chi square test/Fisher's exact test was used to find out the association between non-compliance towards exclusive breastfeeding among mother with selected socio-demographical and clinical Data.

**Summary**

To tackle the research problem, it is crucial to establish a framework for the research process. This chapter encompasses the research approach, design, variables under study, research setting, inclusion and exclusion criteria for the population, sample size, sampling technique, tools and instruments for data collection, validity and reliability of the tools, language translation, data collection technique, ethical considerations, details of the pilot study, procedure for data collection, and the plan for data analysis. Results and an analysis of the findings are covered in the following chapter.

# CHAPTER- IV
# RESULT

# Chapter IV

## RESULTS

This chapter presents the analysis and interpretation of data collected using self- structured tool from 245 mothers whose children were between the age group 6 months to 2 years.

The purpose of the data analysis is to check, reorder and present available data in the form of applicable and understandable information. It is necessary because the researcher should be able to make meaningful deductions and conclusions from the data. It is a very critical part of researching so that the results can be properly used and applied.[41]

Data gathered were analyzed using descriptive and inferential statistics, the analysis of the data of the present study has been organized under the following headings in relation to the objectives and the hypotheses of the study. (ANNEXURE- 14)

## ORGANIZATION AND PRESENTATION OF THE DATA

**SECTION I (a):** Description of Sociodemographic Characteristics having mother information.

**SECTION I (b):** Description of Sociodemographic Characteristics having child information.

**SECTION II:** Description of Clinical variable.

**SECTION III:** Description of Prevalence of non-compliance towards exclusive breastfeeding among mothers.

**SECTION IV (a):** Description of item analysis of maternal factors associated with non-compliance towards exclusive breastfeeding.

**SECTION IV (b):** Description of item analysis of infant factors associated with non-compliance towards exclusive breastfeeding.

**SECTION IV (c):** Description of item analysis of socio-cultural factors associated with non-compliance towards exclusive breastfeeding.

**SECTION V:** Logistic regression analysis to find out the factors hindering Exclusive breast feeding.

**SECTION VI (a):** Association between non-compliance towards exclusive breastfeeding among mothers with selected socio-demographic variables.

**SECTION VI (b):** Association between non-compliance towards exclusive breastfeeding among mothers with clinical variables.

## Section I (a)

### Description of Sociodemographic Characteristics having mother information.

Table 1: Frequency and percentage distribution of socio-demographical data of mother

(N=245)

| S.N. | Name of variables | Frequency | percentage |
|---|---|---|---|
| 1 | **Mother's age ( in years)** | | |
| | 18-22 year | 24 | 9.8 |
| | 22-27 year | 144 | 58.8 |
| | 27- 32 year | 60 | 24.5 |
| | >32year | 17 | 6.9 |
| 2 | **Marital status** | | |
| | Married | 244 | 99.6 |
| | Widowed | 0 | 0.0 |
| | Divorced | 1 | 0.4 |
| 3 | **Religion** | | |
| | Hindu | 214 | 87.3 |

| | | | |
|---|---|---|---|
| | Muslim | 31 | 12.7 |
| | Christian | 0 | 0.0 |
| 4 | **Mother's Educational Status** | | |
| | Professional Degree | 11 | 4.5 |
| | Graduate | 41 | 16.7 |
| | Diploma | 49 | 20.0 |
| | High school | 59 | 24.1 |
| | Middle school | 70 | 28.6 |
| | Primary School | 15 | 6.1 |
| | Illiterate | | |
| 5 | **Husband's Education Status** | | |
| | Professional Degree | 24 | 9.8 |
| | Graduate | 79 | 32.2 |
| | Diploma | 49 | 20.0 |
| | High School | 58 | 23.7 |
| | Middle school | 30 | 12.2 |
| | Primary school | 5 | 2.0 |
| | Illiterate | 0 | 0.0 |
| 6 | **Mother occupation** | | |
| | Home maker | 187 | 76.3 |
| | Government employee | 17 | 6.9 |
| | Private employee | 32 | 13.1 |
| | Labour class | 1 | 0.4 |
| | Self employed | 8 | 3.3 |
| | Unemployed | 0 | 0.0 |
| 7 | **Husband occupation** | | |
| | Government employee | 44 | 18.0 |
| | Private employee | 83 | 33.9 |
| | Labour class | 37 | 15.1 |
| | Self employed | 71 | 29.0 |
| | Unemployed | 10 | 4.1 |
| 8 | **Residential Area** | | |

| | | | |
|---|---|---|---|
| | Urban | 62 | 25.3 |
| | Semi-Urban | 104 | 42.4 |
| | Rural | 68 | 27.8 |
| | Slum | 11 | 4.5 |
| 9 | **Type of family** | | |
| | Nuclear family | 133 | 54.3 |
| | Joint Family | 111 | 45.3 |
| | extended family | 1 | 0.4 |
| 10 | **No. of live children** | | |
| | a) 1 | 92 | 37.6 |
| | b) 2 | 125 | 51.0 |
| | c) 3 | 21 | 8.6 |
| | d) >3 | 7 | 2.9 |
| 11 | **Total monthly income of the family** | | |
| | Equal to or more than 185,895 | 0 | 0.0 |
| | 92,951 – 185,894 | 6 | 2.4 |
| | 69,535 – 92,950 | 21 | 8.6 |
| | 46,475 – 69,534 | 32 | 13.1 |
| | 27883 – 46474 | 53 | 21.6 |
| | 9208 – 27882 | 88 | 35.9 |
| | e) less than or equal to 9207 | 45 | 18.4 |

Table 1 outlines the socio-demographic characteristics of the mothers in the study. The data indicates that a significant proportion, 144 (58.8%), of mothers were within the 22-27 age group, while only 17 (6.9%) were aged 32 and above. Overwhelming majority, 244 (99.6%), were reported as married, and a predominant 214 (87.3%) identified as Hindu. In terms of educational status, mothers exhibited diverse backgrounds. The majority of mothers were homemakers 187 (76.3%). 104 (42.4%) lived in semi-urban followed by 68% (27.8) in rural area. Income range of 9208 – 27882 was identified in 88 (35.9%) participants and with none reporting an income equal to or more than 185,895.

## Section I (b)

### Description of Sociodemographic Characteristics having youngest child information.

Table 2: Frequency and percentage distribution of socio-demographical data of youngest child.

(N=245)

| S.N. | Name of variables | Frequency | percentage |
|---|---|---|---|
| 1 | **Age of child** | | |
| | 6 month -1 year | 114 | 46.5 |
| | 1 year- 1.5 year | 85 | 34.7 |
| | 1.5 year- 2 year | 46 | 18.0 |
| 2 | **Gender of the child** | | |
| | Male | 121 | 49.4 |
| | Female | 124 | 50.6 |
| | Transgender | | |
| 3 | **Weight of the child at birth (in kg)** | | |
| | 1-1.5 kg | 1 | 0.4 |
| | >1.5-2 kg | 7 | 2.9 |
| | >2-2.5 kg | 80 | 32.7 |
| | >2.5 kg | 157 | 64.1 |

Table 2 provided an insight of socio-demographic characteristics of the youngest child in the study. A significant proportion 114 (46.5%) of the children were in the age range of 6 months to 1 year followed by 85 (34.7%) fell within the 1 year to 1.5-year. In gender distribution, 49.4% were male, and 50.6% were female. The majority, comprising 157 (64.1%) had a birth weight greater than 2.5 kg.

## SECTION II

### Description of Clinical variable.

Table 3: showing frequency and percentage distribution of clinical variables

(N=245)

| S.N. | Name of variables | Frequency | percentage |
|---|---|---|---|
| 1 | **Type of Pregnancy** | | |
| | Planned | 188 | 76.7 |
| | Unplanned | 57 | 23.3 |
| 2 | **Attend all the ANC visits as per schedule** | | |
| | Yes | 229 | 93.5 |
| | No | 16 | 6.5 |
| 3 | **Type of Delivery** | | |
| | Normal Delivery | 180 | 73.5 |
| | Instrumental Delivery | 7 | 2.9 |
| | Caesarean Delivery | 58 | 23.7 |
| 4 | **Place of Delivery** | | |
| | Tertiary Care Hospital | 151 | 61.6 |
| | Community Health Centre | 63 | 25.7 |
| | Sub-centre or PHC | 16 | 6.5 |
| | Home | 15 | 6.1 |
| 5 | **Gestation age at the time of Delivery** | | |
| | Less than 37 weeks of gestation | 3 | 1.2 |
| | Within 37-42 weeks of gestation | 208 | 84.9 |
| | More than 42 weeks of gestation | 31 | 12.7 |
| | Don’t Remember | 3 | 1.2 |

| | | | |
|---|---|---|---|
| 6 | **Parity Status** | | |
| | Primipara | 94 | 38.4 |
| | Multipara | 151 | 61.6 |
| 7 | **Time of initiation of Breastfeeding after Delivery** | | |
| | Within 1 hour | 95 | 38.8 |
| | 1 hour- 2 hours | 64 | 26.1 |
| | 2 hour- 3 hours | 26 | 10.6 |
| | More than 3 hours | 60 | 24.5 |

93.5% of participants indicated a high adherence to ANC schedules. 73.5%, experienced normal deliveries, while 2.9% had instrumental deliveries, and 23.7% underwent Caesarean deliveries. 61.6% delivering in tertiary care hospitals, 25.7% in CHC, 6.5% in sub-centers or Primary Health Centers (PHCs), and 6.1% at home. Majority 208 ( 84.9%) mothers delivered within the 37-42 weeks range. 38.4% were primiparous, while 61.6% were multiparous. 38.8% initiated breastfeeding within 1 hour, 26.1% within 1-2 hours, 10.6% within 2-3 hours, and 24.5% after more than 3 hours.

## Section III

### Prevalence of non-compliance towards exclusive breastfeeding among mothers

Table 4: showing frequency-percentage of Prevalence of non-compliance towards exclusive breastfeeding among mothers

(N= 245)

| S.N. | Nature of compliance | Frequency | Percentage |
|---|---|---|---|
| 1 | Compliance to exclusive breastfeeding | 122 | 49.8 |
| 2 | Non-compliance to exclusive breastfeeding | 123 | 50.2 |

Table 4 data indicated that of the 245 respondent included in the study, 49.8% demonstrated adherence to exclusive breastfeeding practices, while the remaining 50.2% exhibited non-compliance. This finding underscores a nearly equal distribution between those having compliance and those having non-compliance towards exclusive breastfeeding guidelines.

## Section IV (a)

**Description of item analysis of maternal factors associated with non-compliance towards exclusive breastfeeding.**

Table 5: Frequency and percentage distribution of maternal factors hindering exclusive breastfeeding.

(N=123)

| Name of factor | Level of agreement | | | | | |
|---|---|---|---|---|---|---|
| | Disagree | | Agree | | Strongly agree | |
| | (f) | (%) | (f) | (%) | (f) | (%) |
| Mother was too weak as Mother was not taking proper nutrition, so I gave upon breastfeeding. | 84 | 68.3 | 32 | 26.0 | 7 | 5.7 |
| Mother had backache while feeding child. | 36 | 29.3 | 64 | 52.0 | 23 | 18.7 |
| Mother had pain in the breast during feeding. | 55 | 44.7 | 46 | 37.4 | 22 | 17.9 |
| Mother inverted and sore nipple caused difficulty in feeding. | 110 | 89.4 | 3 | 2.4 | 10 | 8.1 |
| Mother was having breast problem like mastitis and breast abscess. | 121 | 98.4 | 1 | .8 | 1 | .8 |
| Mother was having inadequate milk production. | 26 | 21.1 | 38 | 30.9 | 59 | 48.0 |
| Mother sleep pattern was disturbed due to multiple breastfeeding, which made me stop breastfeeding | 84 | 68.3 | 32 | 26.0 | 7 | 5.7 |
| Mother had to discontinue breastfeeding to return back to the work. | 117 | 95.1 | 2 | 1.6 | 4 | 3.3 |
| Mother was not able to go out so I gave up breastfeeding early. | 111 | 90.2 | 12 | 9.8 | 0 | 0.0 |
| Mother didn't have adequate knowledge/ was not aware about exclusive breastfeeding. | 115 | 93.5 | 6 | 4.9 | 2 | 1.6 |
| Mother was very anxious as it was my first child, which hindered my breastfeeding pattern. | 79 | 64.2 | 21 | 17.1 | 23 | 18.7 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Mother thought breastfeeding will lead to sagging of breast, which will disturb my body image. | 123 | 100.0 | 0 | 0.0 | 0 | 0.0 |
| Mother felt top feed along with breastfeed will provide more nutrients and energy to my child. | 10 | 8.1 | 105 | 85.4 | 8 | 6.5 |

Table 5 showed that among all maternal factors, the predominant factor with which mothers strongly agreed was inadequate milk production, constituting 48.0% (59 mothers). This was followed by concerns such as "Mother had backache while feeding the child" and "Mother was very anxious as it was her first child," both noted by 18.7% (23 mothers). All 123 (100%) non-compliance mothers disagreed to the statement “They thought breastfeeding will lead to sagging of breast, which will disturb my body image.” among all maternal factors,

**Section IV (b)**

**Description of item analysis of infant factors associated with non-compliance towards exclusive breastfeeding.**

Table 6: Frequency and percentage distribution of infant factors hindering exclusive breastfeeding.

(N=123)

| **Name of factor** | **Level of Agreement** | | | | | |
|---|---|---|---|---|---|---|
| | **Disagree** | | **Agree** | | **Strongly agree** | |
| | (f) | (%) | (f) | (%) | (f) | (%) |
| Child was unable to suck or latch properly. | 82 | 66.7 | 40 | 32.5 | 1 | 0.8 |
| Infant was crying even after multiple breastfeeding, which made me use additional feed | 21 | 17.1 | 102 | 82.9 | 0 | 0.0 |
| baby used to vomit after each feed/having digestive issue | 104 | 84.6 | 19 | 15.4 | 0 | 0.0 |
| baby was separated from mother, was in NICU/with grandparents | 96 | 78.0 | 16 | 13.0 | 11 | 8.9 |
| Baby was not gaining weight so mother started top feeds | 10 | 8.1 | 111 | 90.2 | 2 | 1.6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| The baby was not sleeping at night so mother gave top feed to pacify him/her | 64 | 52.0 | 58 | 47.2 | 1 | 0.8 |

Table 6 showed that 11 (8.9%) mothers who did not comply strongly agreed that they did not breastfeed because their baby was either in the NICU or with grandparents. The statement "Baby was not gaining weight so mother started top feeds" was agreed upon by 111 (90.2) mothers, and 104 (84.6%) women agreed with the statement "Baby used to vomit after each feed/having digestive issue."

**Section IV (c)**

**Description of item analysis of infant factors associated with non-compliance towards exclusive breastfeeding.**

Table 7: Frequency and percentage distribution of socio-cultural factors hindering exclusive breastfeeding.

(N=123)

| Name of factor | Level of Agreement | | | | | |
|---|---|---|---|---|---|---|
| | Disagree | | Agree | | Strongly agree | |
| | (f) | (%) | (f) | (%) | (f) | (%) |
| Mother friends/family advised me to start with additional feed before 6 months | 10 | 8.1 | 78 | 63.4 | 35 | 28.5 |
| mother wasn't advised for exclusive breastfeeding by hospital staff after delivery. | 103 | 83.7 | 16 | 13.0 | 4 | 3.3 |
| mother had lack of encouragement from her husband and family members. | 118 | 95.9 | 5 | 4.1 | 0 | 0.0 |
| Colostrum is "bad milk" so baby had to be fed with top feed initially. | 120 | 97.6 | 2 | 1.6 | 1 | .8 |
| Breastfeeding in public is embarrassing and not valued by our society. | 107 | 87.0 | 14 | 11.4 | 2 | 1.6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| mother couldn't breastfeed her child for some days due to some family disputes or crises. | 119 | 96.7 | 3 | 2.4 | 1 | .8 |
| There was easy availability of cow milk at home so mother gave cow milk to the infant. | 29 | 23.6 | 89 | 72.4 | 5 | 4.1 |
| Formula milk is more nutrient and good for the baby's growth and development as seen in advertisement. | 63 | 51.2 | 57 | 46.3 | 3 | 2.4 |
| Family thought mother was spending most of the time in breastfeeding and avoiding household chores | 119 | 96.7 | 4 | 3.3 | 0 | 0.0 |

Table 7 showed that among all socio-cultural factors, 35 (28.5%) noncompliant mothers strongly agreed that, their friends/family advised them to start with additional feed before 6 months and none of the mothers stated that they had received "no encouragement from her husband and family members." The statement, "There was easy availability of cow milk at home so mother gave cow milk to the infant," was agreed upon by 89 (72.4%) mothers.

**Section V (a)**

Table 8: Multivariate Logistic regression analysis on the factors hindering Exclusive breast feeding.

(N=245)

| **Q. N.** | **Independent variable vs Response category (0=disagree, 1= agree, 2= strongly agree)** | **OR** | **P value** | **AOR** | **95% CI** | |
|---|---|---|---|---|---|---|
| | | | | | **Lower** | **Upper** |
| | **Maternal factors** | | | | | |
| 1 | Mother was too weak as Mother was not taking proper nutrition, so I gave upon breastfeeding. | 0.508 | 0.106 | 1.661 | 0.898 | 3.071 |
| 2 | Mother had backache while feeding child. | 1.439 | 0.001* | 4.216 | 2.159 | 8.234 |
| 3 | Mother had pain in the breast during feeding. | 1.821 | 0.001* | 6.179 | 3.135 | 12.178 |
| 4 | Mother inverted and sore nipple caused difficulty in feeding. | 1.284 | 0.003* | 3.609 | 1.532 | 8.504 |
| 5 | Mother was having breast problem like mastitis and breast abscess. | 20.38 | 0.387 | 1.659 | 0.388 | 3.082 |
| 6 | Mother was having inadequate milk production. | 1.226 | 0.001* | 3.409 | 1.864 | 6.235 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | Mother sleep pattern was disturbed due to multiple breastfeeding, which made me stop breastfeeding | 1.140 | 0.001* | 3.128 | 1.601 | 6.111 |
| 8 | Mother had to discontinue breastfeeding to return back to the work. | 19.95 | 0.387 | 1.459 | 0.451 | 4.062 |
| 9 | Mother was not able to go out so I gave up breastfeeding early. | 2.385 | 0.003* | 10.857 | 2.259 | 52.191 |
| 10 | Mother didn't have adequate knowledge/ was not aware about exclusive breastfeeding. | 2.398 | 0.024* | 11.004 | 1.379 | 87.805 |
| 11 | Mother was very anxious as it was my first child, which hindered my breastfeeding pattern. | 0.811 | 0.001* | 2.250 | 1.392 | 3.635 |
| 12 | Mother thought breastfeeding will lead to sagging of breast, which will disturb my body image. | -.550 | 0.003* | 0.577 | -6.111 | -1.601 |
| 13 | Mother felt top feed along with breastfeed will provide more nutrients and energy to my child. | 0.960 | 0.077 | 2.613 | 0.901 | 7.573 |
| | **Infant factors** | | | | | |
| 14 | Child was unable to suck or latch properly. | 3.465 | 0.001* | 31.983 | 11.324 | 90.330 |
| 15 | Infant was crying even after multiple breastfeeding, which made me use additional feed | 0.223 | 0.001* | 0.672 | 1.250 | 0.445 |
| 16 | baby used to vomit after each feed/having digestive issue | 1.821 | 0.001* | 6.179 | 2.136 | 17.871 |
| 17 | baby was separated from mother, was in NICU/with grandparents | 3.165 | 0.001* | 23.700 | 6.508 | 86.306 |
| 18 | Baby was not gaining weight so mother started top feeds | 20.87 | 0.783 | 116.84 | 0.572 | 2.136 |
| 19 | The baby was not sleeping at night so mother gave top feed to pacify him/her | 3.139 | 0.001* | 23.087 | 7.412 | 71.907 |
| | **Socio-Cultural factors** | | | | | |
| 20 | Mother friends/family advised me to start with additional feed before 6 months | 1.619 | 0.002* | 5.046 | 1.847 | 13.788 |
| 21 | mother wasn't advised for exclusive breastfeeding by hospital staff after delivery. | 3.762 | 0.001* | 43.046 | 10.758 | 172.240 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 22 | mother had lack of encouragement from her husband and family members. | 1.447 | 0.128 | 4.250 | 0.658 | 27.443 |
| 23 | Colostrum is "bad milk" so baby had to be fed with top feed initially. | 2.185 | 0.060 | 8.892 | 0.915 | 86.414 |
| 24 | Breastfeeding in public is embarrassing and not valued by our society. | 2.149 | 0.001* | 8.577 | 2.822 | 26.063 |
| 25 | mother couldn't breastfeed her child for some days due to some family disputes or crises. | 2.721 | 0.021* | 15.192 | 1.517 | 152.136 |
| 26 | There was easy availability of cow milk at home so mother gave cow milk to the infant. | 1.450 | 0.023* | 4.261 | 1.217 | 14.914 |
| 27 | Formula milk is more nutrient and good for the baby's growth and development as seen in advertisement. | 1.026 | 0.031* | 2.790 | 1.096 | 7.099 |
| 28 | Family thought mother was spending most of the time in breastfeeding and avoiding household chores | 1.862 | 0.072 | 6.437 | 0.846 | 48.991 |

Table 8: depicts the interpretation that there is significant association between Selected factors with noncompliance towards exclusive breastfeeding.

In maternal factors mothers experiencing backaches while feeding, pain in the breast during feeding, and inverted or sore nipples causing difficulty in feeding, mothers facing inadequate milk production and those with disturbed sleep patterns due to multiple breastfeeding sessions were also more likely to stop exclusive breastfeeding, mothers not able to go out leading to early discontinuation, and those lacking adequate knowledge or awareness about exclusive breastfeeding, mothers who felt anxious due to being first-time mothers, mothers not able to go out, leading to early discontinuation, and those lacking adequate knowledge or awareness about exclusive breastfeeding, mothers who felt anxious due to being first-time mothers shows a statistically significant association.with non-compliance. Additionally, mothers thinking that breastfeeding would lead to sagging of the breast (OR=-0.550, p=0.003, AOR=0.577, 95% CI=-6.111-1.601) were negatively associated with a lower odds ratio for non-compliance.

Infant factors were also examined for their influence on exclusive breastfeeding practices. Mothers with infants unable to suck or latch properly, infants crying even after multiple breastfeeding sessions, infants who vomited after each feed or had digestive issues, infant who were separated from their mothers and placed in NICU or with grandparents and those not gaining weight, leading to the initiation of top feed were significantly associated with a higher likelihood of non-compliance.

In Socio-cultural factors mothers receiving advice from friends or family to start additional feed before 6 months  Additionally, mothers not being advised for exclusive breastfeeding by hospital staff after delivery, breastfeeding in public embarrassing, mothers providing cow milk due to its easy availability, those influenced by the perception that formula milk is more nutrient and good for the baby's growth and development, as seen in advertisements were significantly associated with non-compliance.

## Section VI (a)

**This section describes association between non-compliance towards exclusive breastfeeding among mothers with selected socio-demographic and clinical variables.**

Table 9 showing Chi square test to assess association between non-compliance towards exclusive breastfeeding among mothers with selected socio-demographic variables.

(N=245)

| S.N. | Name of variables | Non-compliance | | Chi square | df | P value |
|---|---|---|---|---|---|---|
| | | Absent | Present | | | |
| 1 | **Mother's age ( in years)** | | | 7.637 | 3 | 0.054 |
| | 18-22 year | 8 | 16 | | | |
| | 22-27 year | 82 | 62 | | | |
| | 27- 32 year | 25 | 35 | | | |
| | >32year | 7 | 10 | | | |
| 2 | **Marital status** | | | 0.996 | 1 | 0.318 |
| | Married | 122 | 122 | | | |
| | Widowed | 0 | 0 | | | |
| | Divorced | 0 | 1 | | | |
| 3 | **Religion** | | | 0.877 | 1 | 0.349 |
| | Hindu | 109 | 105 | | | |
| | Muslim | 13 | 18 | | | |
| 4 | **Mother's Educational Status** | | | 3.608 | 5 | 0.607 |
| | Professional Degree | 3 | 8 | | | |
| | Graduate | 20 | 21 | | | |
| | Diploma | 26 | 23 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | High school | 29 | 30 | | | |
| | Middle school | 38 | 32 | | | |
| | Primary School | 6 | 9 | | | |
| 5 | **Husband's Education Status** | | | 2.838 | 5 | 0.725 |
| | Professional Degree | 11 | 13 | | | |
| | Graduate | 36 | 43 | | | |
| | Diploma | 29 | 20 | | | |
| | High School | 30 | 28 | | | |
| | Middle school | 14 | 16 | | | |
| | Primary school | 2 | 3 | | | |
| 6 | **Mother occupation** | | | 5.312 | 4 | 0.257 |
| | Home maker | 98 | 89 | | | |
| | Government employee | 5 | 12 | | | |
| | Private employee | 14 | 18 | | | |
| | Labour class | 0 | 1 | | | |
| | Self employed | 5 | 3 | | | |
| 7 | **Husband occupation** | | | 3.085 | 4 | 0.544 |
| | Government employee | 18 | 26 | | | |
| | Private employee | 44 | 39 | | | |
| | Labour class | 17 | 20 | | | |
| | Self employed | 39 | 32 | | | |
| | Unemployed | 4 | 6 | | | |
| 8 | **Residential Area** | | | 0.558 | 3 | 0.906 |
| | Urban | 29 | 33 | | | |
| | Semi-Urban | 54 | 50 | | | |
| | Rural | 33 | 35 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Slum | 6 | 5 | | | |
| 9 | **Type of family** | | | 5.196 | 2 | 0.074 |
| | Nuclear family | 58 | 75 | | | |
| | Joint Family | 63 | 48 | | | |
| | Extended | 1 | 0 | | | |
| 10 | **No. of live children** | | | 9.876 | 3 | 0.020* |
| | a) 1 | 41 | 51 | | | |
| | b) 2 | 72 | 53 | | | |
| | c) 3 | 5 | 16 | | | |
| | d) >3 | 4 | 3 | | | |
| 11 | **Total monthly income of the family** | | | 5.789 | 5 | 0.327 |
| | 92,951 – 185,894 | 3 | 3 | | | |
| | 69,535 – 92,950 | 7 | 14 | | | |
| | 46,475 – 69,534 | 15 | 17 | | | |
| | 27883 – 46474 | 27 | 26 | | | |
| | 9208 – 27882 | 51 | 37 | | | |
| | e) less than or equal to 9307 | 19 | 26 | | | |
| 12 | **Age of child** | | | 2.228 | 3 | 0.526 |
| | 6 month -1 year | 56 | 58 | | | |
| | 1 year- 1.5 year | 41 | 44 | | | |
| | 1.5 year- 2 year | 23 | 21 | | | |
| | | 2 | 0 | | | |
| 13 | **Gender of the child** | | | 1.181 | 1 | 0.277 |
| | Male | 56 | 65 | | | |
| | Female | 66 | 58 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 14 | **Weight of the child at birth (in kg)** | | | 23.383 | 3 | 0.001* |
| | 1-1.5 kg | 0 | 1 | | | |
| | >1.5-2 kg | 0 | 7 | | | |
| | >2-2.5 kg | 27 | 53 | | | |
| | >2.5 kg | 95 | 62 | | | |

Table 9 revealed that, except for the number of live children ($\chi2 = 9.876$, df = 3, p = 0.020) and weight of the child at birth ($\chi2 = 23.383$, df = 3, p = 0.001), the selected socio-demographic variables did not exhibit significant associations with non-compliance towards exclusive breastfeeding among the study participants. According to result it is interpretated that research hypothesis is accepted and null hypothesis is rejected.

**Table 10: showing Chi square test to assess association between non-compliance towards exclusive breastfeeding among mothers with selected clinical variables**

(N=245)

| **S.N.** | **Name of variables** | **Non-compliance** | | **Chi square** | **df** | **P value** |
|---|---|---|---|---|---|---|
| | | **Absent** | **Present** | | | |
| 1 | **Type of Pregnancy** | | | 1.757 | 1 | 0.185 |
| | Planned | 98 | 90 | | | |
| | Unplanned | 24 | 33 | | | |
| 2 | **Attend all the ANC visits as per schedule** | | | 0.001 | 1 | 0.987 |
| | Yes | 114 | 115 | | | |
| | No | 8 | 8 | | | |
| 3 | **Type of Delivery** | | | 25.359 | 2 | 0.001* |
| | Normal Delivery | 107 | 73 | | | |
| | Instrumental Delivery | 2 | 5 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Caesarean Delivery | 13 | 45 | | | |
| 4 | **Place of Delivery** | | | 0.388 | 3 | 0.943 |
| | Tertiary Care Hospital | 74 | 77 | | | |
| | Community Health Centre | 31 | 32 | | | |
| | Sub-centre or PHC | 9 | 7 | | | |
| | Home | 8 | 7 | | | |
| 5 | **Gestation age at the time of Delivery** | | | 5.391 | 3 | 0.145 |
| | Less than 37 weeks of gestation | 0 | 3 | | | |
| | Within 37-42 weeks of gestation | 109 | 99 | | | |
| | More than 42 weeks of gestation | 12 | 19 | | | |
| | Don't Remember | 1 | 2 | | | |
| 6 | **Parity Status** | | | 1.596 | 1 | 0.206 |
| | Primipara | 42 | 52 | | | |
| | Multipara | 80 | 71 | | | |
| 7 | **Time of initiation of Breastfeeding after Delivery** | | | 29.415 | 3 | 0.001* |
| | Within 1 hour | 59 | 36 | | | |
| | 1 hour- 2 hours | 38 | 26 | | | |
| | 2 hour- 3 hours | 13 | 13 | | | |
| | More than 3 hours | 12 | 48 | | | |
| 8 | **Age of child** | | | 2.228 | 3 | 0.526 |
| | 6 month -1 year | 56 | 58 | | | |
| | 1 year- 1.5 year | 41 | 44 | | | |
| | 1.5 year- 2 year | 23 | 21 | | | |
| | | 2 | 0 | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9 | **Gender of the child** | | | 1.181 | 1 | 0.277 |
| | Male | 56 | 65 | | | |
| | Female | 66 | 58 | | | |
| 10 | **Weight of the child at birth (in kg)** | | | 23.383 | 3 | 0.001* |
| | 1-1.5 kg | 0 | 1 | | | |
| | >1.5-2 kg | 0 | 7 | | | |
| | >2-2.5 kg | 27 | 53 | | | |
| | >2.5 kg | 95 | 62 | | | |

Table 10 suggest that certain clinical variables, such as the type of delivery, time of initiation of breastfeeding after delivery and weight of the child at birth, shows association with non-compliance towards exclusive breastfeeding among mothers with a p-value <0.005. Therefore the research hypothesis is accepted.

# CHAPTER- V
# DISCUSSION

# CHAPTER V

# DISCUSSION

In alignment with the study's objectives and hypotheses, this chapter presents a concise overview of primary findings, a thorough discussion, implications for nursing practice, identified limitations, conclusion and recommendations for future research arising from the current study.

**Major findings of the study:**

The purpose of the current study was to assess the factors associated with non-compliance towards exclusive breastfeeding among mothers and to determine whether the non-compliance was associated with selected sociodemographic and clinical variables. The study was carried out in Madhya Pradesh at AIIMS Bhopal, and the results are detailed below.

Among a total of 245 mothers having their child in the age group of 6 months to 2 year, 44 (58.4%) belonged to the age group of 22-27 year. Almost all, that is 244, 99.6% mothers were married. 214 (87.3%) mothers were Hindu. Seventy (28.6%) mothers had studied till middle school while only 11 (4.5%) had a professional Degree. Regarding the husband's educational position, only five (2%) had completed basic school, while seventy-nine (32.2) were graduates.187 mothers (76.3%) and 83 husbands (33.9%) were employed as homemakers and private employees, respectively. 35.9% of the population made up the income range of 9208 – 27882.

Majority 114 (46.5%) of children were in the age group of 6- 12 months. The gender of the child had an almost equal distribution of 49.4% and 50.6 % in boys and girls respectively. The majority of the children, comprising 157 (64.1%), had a birth weight greater than 2.5 kg, followed by 80 (32.7%) children who fell within the birth weight range of greater than 2 kg to 2.5 kg.

Among the 245 mothers included in the study, 49.8% demonstrated adherence to exclusive breastfeeding practices, while the remaining 50.2% exhibited non-compliance. This finding underscores a nearly equal distribution between those having compliance and those having non-compliance towards exclusive breastfeeding guidelines.

Among all maternal factors, the predominant factor with which mothers strongly agreed was inadequate milk production, constituting 48.0% (59 mothers). This was followed by concerns such as "Mother had backache while feeding the child" and "Mother was very anxious as it was her first child," both noted by 18.7% (23 mothers). All 123 (100%) non-compliance mothers disagreed to the statement “They thought breastfeeding will lead to sagging of breast, which will disturb my body image.”

Eleven (8.9%) mothers who did not comply strongly agreed that they did not breastfeed because their baby was either in the NICU or with grandparents. The statement "Baby was not gaining weight so mother started top feeds" was agreed upon by 111 (90.2) mothers, and 104 (84.6%) women agreed with the statement "Baby used to vomit after each feed/having digestive issue."

Thirty-five (28.5%) noncompliant mothers strongly agreed that, their friends/family advised them to start with additional feed before 6 months and none of the mothers stated that they had received "no encouragement from her husband and family members." The statement, "There was easy availability of cow milk at home so mother gave cow milk to the infant," was agreed upon by 89 (72.4%) mothers.

The findings of this research shed light on various factors influencing exclusive breastfeeding practices, encompassing maternal, infant, and socio-cultural dimensions. Mothers experiencing backaches, breast pain, and nipple-related issues were significantly more likely to discontinue exclusive breastfeeding with a p-value ($<0.05$). Additionally, those with inadequate milk

production, and disturbed sleep patterns exhibited higher non-compliance rates with a p-value of 0.001. Surprisingly, the perception that breastfeeding leads to breast sagging showed a lower odds ratio for non-compliance, warranting cautious interpretation due to the negative coefficient.

In Infant factors, infants unable to suck or latch properly were strongly associated with non-compliance. Various issues in infants, such as crying after each feed, vomiting, digestive problems, separation from mothers, infants not sleeping at night were significantly linked to a higher likelihood of non-compliance, each boasting a significant p-value of 0.001. However, the association between infant insufficient weight gain did not reach statistical significance.

Socio-cultural factors added depth to the understanding of exclusive breastfeeding practices. Mother was advice from friends or family to introduce additional feeds before 6 months was significantly associated with non-compliance. Lack of advice from hospital staff and insufficient encouragement from husbands and family members were also key contributors to non-compliance. Mothers who believed colostrum was "bad milk" and, as a result, fed the infant with top feed initially showed an odds ratio of 2.185 (p=0.060, AOR=8.892, 95% CI=0.915-86.414), demonstrating a trend towards non-compliance, but not statistically significant. Embarrassment related to breastfeeding in public, family disputes affecting breastfeeding, and easy availability of cow milk at home were identified as significant factors influencing non-compliance. Moreover, the influence of advertising promoting the nutritional benefits of formula milk emerged as a contributing factor.

Notably, significant association was found between non-compliance towards EBF and selected sociodemographic data, indicating that the number of children($\chi 2 = 9.876$, df = 3, p = 0.020) and weight of the child at birth( $\chi 2 = 23.383$, df= 3, p= 0.001)had a statistically significant impact on non-compliance towards exclusive breastfeeding.

A statistically significant association was observed between non-compliance with EBF and specific clinical variables. Specifically, non-compliance was found to be significantly impacted by the type of delivery ($\chi2 = 25.359$, df = 2, p = 0.001) and the timing of breastfeeding initiation after delivery ($\chi2 = 29.415$, df = 3, p = 0.001).

**Discussion**

Non-compliance towards exclusive breastfeeding is a major issue among mothers in developing and developed countries and it was also noticed that sociodemographic and clinical variables had significant association with non-compliance to EBF. Moreover, it was also found that there are various factors hindering EBF. Therefore, it is important to discuss the findings of present study with other studies.

The findings of the present study as per the research objectives are discussed and delineated under the following section-

1. **Socio-demographic and clinical characteristics.**
2. **Prevalence of compliance and non-compliance towards exclusive breastfeeding among mothers.**
3. **Factors associated with non-compliance towards Exclusive Breastfeeding.**
4. **Association of non-compliance towards EBF among mothers with selected sociodemographic and clinical variables.**

1. **Socio-demographic and clinical characteristics.**

In the present study, (58.4%) mothers were in the age group of 22-27 year. Almost all, that is mothers were married. 28.6%) mothers had studied till middle school while only 4.5% had a professional Degree.76.3% mothers were homemakers 35.9% of the population made up the

income range of 9208 – 27882. Majority 46.5% of children were in the age group of 6- 12 months. The gender of the child had an almost equal distribution of boys and girls. The majority of the children, comprising (64.1%) had a birth weight greater than 2.5 kg.

Similar findings were noted in an ambispective observational study conducted among rural population of South India which revealed that maximum number of mothers were in the age group 23-28 years, had an education of matriculation and above (58.5%), majority of the mothers were house maker. [20] Another cross-sectional study conducted in Santo André also disclosed that, almost 60% of mothers had competed high school and 79.37% of mothers had children with normal birth weight.[21] Another study conducted in the southern Chennai community and the nearby districts of Chengalpattu and Kanchipuram revealed that 69.84% mothers were in the age group of 20-30 years. 52.38% had a nuclear family type, 42.9% had completed her basic school education. 89.68% had a planned pregnancy and 66% had taken all 4 ANC visits , mothers had almost equal number of male and female child, all these findings were similar to finding of present study. [23]

Our study findings are in line with the findings of cross-sectional study conducted in Jazan, Saudi Arabia among 360 women also revealed similar findings ; Mothers' age group 26-30 years represents the sample's highest rate(30.6%), 65.8% mothers were housewife, 54.7% of babies were male babies, and 45.3% were female, 61.4% were less than 12 months.[25] However the findings of the study conducted at district Dadu, Sindh, Pakistan demonstrate opposite findings, here most of the mothers were aged between 20 to 40 years (62%). Nearly 2/3rd of the mothers in the study had no formal education, only 5.8% mothers had higher secondary education. More than 1/5th of the mothers had more than 5 children.[27]Another study contradicts the finding of our study where majority of the mothers were primipara and ¾ of population didn't attended all 4 ANC visit [20] , where as in present findings of our study 38.4% mothers are primipara and 93.5 attended all ANC visits.

**2. Prevalence of compliance and non-compliance towards exclusive breastfeeding among mothers.**

The study showed that 49.8% of mothers followed exclusive breastfeeding guidelines, while 50.2% did not and this was comparable to the study in Nigeria where 66.6 % mothers introduced complementary food before 6 months. A study in south India reveals that 70% of mothers gave EBF for more than or equal to six months duration [20] Another study in India found that 55% of the children (0–5 months) were exclusively breastfed. The highest prevalence was observed in the Northeastern regions of India (61.7%) and the lowest in the Central region (50.5%) [21].

Moreover, many study showed low prevalence of EBF. Only 38% of nursing mothers practiced EBF and 62% of mothers could not adhere to EBF recommendations in Youngande.()A descriptive cross-sectional study conducted at district hospital Dadu showed that only 29. 5% mothers practiced exclusive breast feeding [27]. Another study conducted in Saudi Arabia showed a very low compliance of 28.9% towards EBF by the mothers [25].

In parallel to the present study another study was carried out in the city of Serrana, São Paulo, Brazil, in 2009, titled "Prevalence and Determinants of Exclusive Breastfeeding." The outcomes of this study differed, revealing that out of the total 275 infant participants, only 29.8% were found to be exclusively breastfed.[34]

**3. Factors associated with non-compliance towards Exclusive Breastfeeding.**

In the current study, a self-structured questionnaire with three domains—maternal factor, infant factor, and socio-cultural factor—was used to measure the barriers to exclusive breastfeeding using a 3-point Likert scale. Of all the factors, the mother's factor had the strongest correlation with non-compliance, followed by the sociocultural and infant factors. The predominant factor

to which mothers strongly agreed was inadequate milk production (48.0%). In the socio-cultural domain, "Mother friends/family advised me to start with additional feed before 6 months" and "There was easy availability of cow milk at home so mother gave cow milk to the infant" stands out to be the most agreed statements by the non-compliant mothers.

Mothers experiencing backaches, breast pain, and nipple-related issues and lack of milk production were significantly more likely to discontinue exclusive breastfeeding with a p-value (<0.05). Various issues in infants, such as crying after each feed, vomiting, digestive problems, separation from mothers, infants not sleeping at night , infant having difficulty in latching were significantly linked to a higher likelihood of non-compliance, each boasting a significant p-value of 0.001. Public embarrassment, family conflicts, and the convenience of readily available cow milk at home were identified as key factors discouraging breastfeeding compliance.

Our study findings are in line with the findings of cross-sectional study conducted in in Jazan, Saudi Arabia, which revealed that Lack of breast milk, High household burdens were factors influencing non-compliance towards EBF. Mothers also believed that synthetic milk is the best alternative for working mothers to feed their babies.[25] Study findings indicate that many respondents perceived breast milk as insufficient for their babies. Reasons for non-compliance with exclusive breastfeeding included baby dissatisfaction (30.7%), inconvenience of breastfeeding (20.4%), mothers returning to work (16.5%), and influence from family and friends (9.5%).[24] Analogous findings were noticed from study conducted in Pakistan, where the most common reason for non-compliance with the exclusive breastfeeding was the use of formula milk (47%) by the mothers followed by insufficient breast milk (21%).[27] The use of a pacifier was a common factor for early interruption of EBF.[22]

Finding of a qualitative study in Kinshasa revealed themes related to exclusive breastfeeding, including myths and misconceptions about the need for water supplementation, as some mothers believed it posed no harm. Social influence also played a role, with mothers citing family or friends' past experiences as reasons for introducing water alongside breast milk.[30]

A similar study was conducted in Morocco, to explore factors leading to non-compliance of EBF, in which a total of 235 women were enrolled, the findings revealed that 163 (69%) reported exclusively breastfeeding their children. Among those who did not adhere to exclusive breastfeeding, 67% referred insufficient breast milk, while 18% attributed their non-compliance to hospital admission during the neonatal period. These results align closely with the findings of my study.[35]

4. **Association of non-compliance towards EBF among mothers with selected sociodemographic and clinical variables**.

Non-compliance of EBF showed a noteworthy association with certain sociodemographic and clinical factors. Factors such as the number of children, birth weight, delivery type, and the timing of breastfeeding initiation after delivery were found to have a statistically significant impact on non-compliance towards EBF.

Similar to our study, another descriptive study found statistically significant associations between non-compliance to exclusive breastfeeding and factors such as delayed initiation of breastfeeding (beyond the first hour), low birth weight, premature birth, pacifier use, and unplanned pregnancy (p-value < 0.05). Specifically, children with lower birth weight faced a two-fold higher risk of not adhering to EBF for less than 6 months (OR=2.21; 95% CI 1.192–4.102; p=0.012). Conversely, mothers who initiated breastfeeding within the first hour after birth had a reduced risk of non-compliance to EBF for 6 months (OR=0.048; 95% CI 0.281–0.714; p=0.001).[22]

Another study revealed that EBF was better among mothers who had four antenatal visits (adjusted odds ratio (AOR) -1.357), these finding were contradictory to the present study findings. The same study has some findings similar to the present study like present child's birth weight (P = 0.041) and birth order (P = 0.029) were significantly linked to EBF, suggesting higher birth order and adequate birth weight increased the likelihood of EBF for at least 6 months. Additionally, a lower maternal age (P = 0.028) was associated with an increased likelihood of providing EBF.[20]

However, the findings of descriptive cross-sectional study among the mothers of southern Chennai community are inconsistent with the present study and showed that, working mothers [Odds ratio (OR) 3.32; 95% confidence interval (CI) 1.13, 9.70], urban dwellers (OR 6.67; 95% CI 1.12, 39.66) and those brought to a public hospital (OR 5.45; 95% CI 1.44, 20.60) had little chance of EBF. There were absolutely no relationships found between the child's sex, type of delivery, breastfeeding counselling, or early initiation of EBF. [23]

**Limitations of the study**

- It was a retrospective, cross-sectional study hence cause-and-consequence relationships could not be established.
- Information was reported by mothers having child 6 months – 2 year Therefore there, might be a chance of recall bias from retrospective data collection
- The breastfeeding mothers who participated in the study were elected from the hospital settings. Though the results can be generalizable to the population yet again we encourage to conduct community based studies on the subject.
- The tool used in the study was not a standardized tool.

- This study was limited on basis of time due to constraints posed by academic requirements.
- No data were collected about the professions of the mothers or the presence of maternity leave, which might be among the causal factors of early interruption of EBF.

**Implications of the study**

**Nursing Practice**

- Nursing personnel should be trained about breastfeeding counselling.
- The findings of the study can be helpful for nurses in identifying factors related to non-compliance of EBF.
- Breastfeeding promotion programs should be conducted by nurses to raise maternal awareness about the importance of exclusive breastfeeding in community settings.
- Offer more counselling and training sessions on breast milk expression to support mothers establish sufficient milk supply.
- Strategies such as educating mothers on the physiology of breast milk production before and after delivery should be incorporated in intervention programs.
- Mothers should get support during breastfeeding initiation, and factors that influence milk let down such as timely initiation, appropriate suckling pattern, frequent breastfeeding, and adequate dietary intake should be explained to mothers.

**Nursing Education:**

- In service educational programs related to Breastfeeding , BFHI and 1o steps to successful breastfeeding.
- Nurse educators can provide training and workshops to the students and other multidisciplinary professionals.

**Nursing Administration:**

- Nurse administrators can prepare standard protocols for community health nurses for early initiation of EBF.
- Nurse administrators can create awareness programs like Breastfeeding awareness week at community setting.

**Conclusion**

The findings of the study exhibited that non-compliance towards exclusive breastfeeding is still prevalent and had not reached the WHO targets. Hence, there is a need to provide support and counselling to the mothers regarding breastfeeding. The current study provided the base for exploring the factors hindering Exclusive breastfeeding among women. These factors should be identified by the nurses by having multiple interactive session with mothers time to time. In this study significant association between non-compliance and socio-demographic and clinical variable was present, therefore they must also be identified and mothers should be educated regarding breastfeeding through out the pregnancy and during ANC Visits.

**Recommendation:**

The researcher proposes the following recommendations for further research in view of findings and limitations of the study:

- Mix method and qualitative study can be done for in depth exploration of factors hindering exclusive breastfeeding.
- These factors affecting non-compliance to exclusive breastfeeding can be controlled by implementing breastfeeding support programme and promoting awareness in rural areas.
- Boosting awareness among mothers may not be sufficient. Therefore all parties need to get involved, especially healthcare professionals, mother-in law , husband and family members to address the factors leading to non-compliance towards exclusive breastfeeding.
- More research is required in the arena of community pediatrics.

**Summary:**

This chapter outlines the main findings of the study, comparing them with existing research. It discusses both similar and conflicting results from other studies on the same topic. The chapter covers study limitations, implications, and concludes with recommendations for future research.

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**ANNEXURE 1**
**SCREENING TOOL**

नर्सिंग महाविद्यालय, एम्स भोपाल
NURSING COLLEGE, AIIMS BHOPAL

## SCREENING TOOL

1. DATE OF ASSESSMENT ……

2. Age of the Child (in years) ……..

3. Do you remember the time span of exclusive breastfeeding in your youngest child

   Yes/No

4. Did your child have any congenital birth defects like cleft lip, cleft palate, TEF and metabolic disorders (phenylketonuria, galactosemia, lactose intolerance)? [Yes/No]

5. Are you able to understand Hindi or English? [Yes/No]

**SELECTED FOR THE STUDY**

- [ ] YES [ ] NO

1. CODE NO. ……

2. PLACE OF SCREENING ……..

**ANNEXURE 2**
**DATA COLLECTION TOOL (ENGLISH)**

**Tool**

**Description of tools**

The tool was prepared on the basis of related literature relevant to the research title. The tool was divided into three sections. Section A consists of Part A having Sociodemographic data followed by Part B having clinical variables , Section B consist of questionnaire to find out non-compliance towards exclusive Breastfeeding and Section C contains the statements which explores the various factors hindering exclusive breastfeeding.

**Section A: Sociodemographic and Clinical Data**
Sociodemographic data consist of part 1 having mother and child information and part 2 having Clinical data.

**Instructions:** Kindly tick(✓) the most appropriate answer for each item. The information provided by you will be kept confidential and will only be used for research purpose.

**Part A-Mother and child information**

**Mother information:**

1) Mother's age ( in years)
   a) 18-22 year
   b) 22-27 year
   c) 27- 32 year
   d) >32year

2) Marital status
   a) Married
   b) Widowed
   c) Divorced

3) Religion
   a) Hindu
   b) Muslim
   c) Christian
   d) Other specify ----------

4) Mother's Educational Status (according to socio-economic status scale of Kuppuswamy)

a) Professional Degree
b) Graduate
c) Diploma
d) High school
e) Middle school
f) Primary School
g) Illiterate

5) Husband's Education Status (according to socio-economic status scale of Kuppuswamy)

a) Professional Degree
b) Graduate
c) Diploma
d) High School
e) Middle school
f) Primary school
g) Illiterate

6) Mother occupation

a) Home maker
b) Government employee
c) Private employee
d) Labour class
e) Self employed
f) Unemployed

7) Husband occupation

a) Government employee
b) Private employee
c) Labour class
d) Self employed
e) Unemployed

8) Residential Area

a) Urban
b) Semi-Urban
c) Rural
d) Slum

9)Type of family

a) Nuclear family

b) Joint Family

10) No. of live children

a) 1

b) 2

c) 3

d) >3

11. Total monthly income of the family (according to Socio- economic status scale of Kuppuswamy)

a) Equal to or more than 185,895

b) 92,951 – 185,894

c) 69,535 – 92,950

d) 46,475 – 69,534

e) 27883 – 46474

f) 9208 – 27882

e) less than or equal to 9307

**Child's Information (Youngest Child)**

12. Age of child

a) 6 month -1 year

b) 1 year- 1.5 year

c) 1.5 year- 2 year

13. Gender of the child

a) Male

b) Female

c) Transgender

14. Weight of the child at birth (in kg)

a) 1-1.5 kg

b) >1.5-2 kg

c) >2-2.5 kg

d) >2.5 kg

**Part - B: Clinical Variable**

**Instructions for the participants:** Please tick (√) the option of your choice in the box provided at the side.

15. Type of Pregnancy
    a) Planned
    b) Unplanned

16. Did you attend all the ANC visits as per schedule?
    a) Yes
    b) No

17. Did you delivered twins in your last pregnancy
    a) Yes
    b) No

18. Type of Delivery
    a) Normal Delivery
    b) Instrumental Delivery
    c) Caesarean Delivery

19. Place of Delivery
    a) Tertiary Care Hospital
    b) Community Health Centre
    c) Sub-centre or PHC
    d) Home

20. Gestation age at the time of Delivery
    a) Less than 37 weeks of gestation
    b) Within 37-42 weeks of gestation
    c) More than 42 weeks of gestation
    d) Don't Remember

21. Parity Status
    a) Primipara
    b) Multipara

22. Time of initiation of Breastfeeding after Delivery
    a) Within 1 hour
    b) 1 hour- 2 hours
    c) 2 hour- 3 hours
    d) More than 3 hours

**SECTION B: Questionnaire to find out Non-Compliance towards Exclusive Breastfeeding.**

**Instructions for the participants:** Please tick (√) the option of your choice in the box provided at the side.

Did you provide your child only breast or expressed breast milk till 6 months and no additional food ,drink and honey (with exception of drop of syrups consisting of vitamins, minerals supplements or medicines).

YES ☐

NO ☐

**SECTION C: Consist of statements on factors hindering exclusive breastfeeding.**

**Instruction for Participants:** Please rate the following statements on the scale of 0 to 2 by placing a tick mark (√ ) in the box , which is appropriate according to you.

| Statement | Disagree | Agree | Strongly Agree |
|---|---|---|---|
| **MATERNAL FACTORS** | | | |
| 1. I was too weak as I was not taking proper nutrition, so I gave upon breastfeeding. | | | |
| 2. I had backache while feeding my child. | | | |
| 3. I had pain in the breast during feeding. | | | |
| 4. My inverted and sore nipple caused difficulty in feeding. | | | |
| 5. I was having breast problem like mastitis and breast abscess. | | | |
| 6. I was having inadequate milk production. | | | |
| 7. My sleep pattern was disturbed due to multiple breastfeeding, which made me stop breastfeeding . | | | |
| 8. I had to discontinue breastfeeding to return back to the work. | | | |
| 9. I was not able to go out so I gave up breastfeeding early. | | | |
| 10. I didn't have adequate knowledge/ was not aware about exclusive breastfeeding. | | | |

| | | | |
|---|---|---|---|
| 11. I was very anxious as it was my first child, which hindered my breastfeeding pattern. | | | |
| 12. I thought breastfeeding will lead to sagging of breast, which will disturb my body image. | | | |
| 13. I felt top feed along with breastfeed will provide more nutrients and energy to my child. | | | |
| **INFANT FACTORS** | | | |
| 14. Child was unable to suck or latch properly. | | | |
| 15. Infant was crying even after multiple breastfeeding, which made me use additional feed | | | |
| 16. My baby used to vomit after each feed/having digestive issue | | | |
| 17. My baby was separated from me , was in NICU/with grandparents | | | |
| 18. Baby was not gaining weight so I started top feeds | | | |
| 19. The baby was not sleeping at night so I gave top feed to pacify him/her | | | |
| **SOCIO-CULTURAL FACTORS** | | | |
| 20 My friends/family advised me to start with additional feed before 6 months | | | |
| 21. I wasn't advised for exclusive breastfeeding by hospital staff after delivery. | | | |
| 22. I had lack of encouragement from my husband and family members. | | | |
| 23. Colostrum is "bad milk" so baby had to be fed with top feed initially. | | | |
| 24. Breastfeeding in public is embarrassing and not valued by our society. | | | |
| 25. I couldn't breastfeed my child for some days due to some family disputes or crises. | | | |
| 26. There was easy availability of cow milk at home so I gave cow milk to the infant. | | | |
| 27. Formula milk is more nutrient and good for the baby's growth and development as seen in advertisement. | | | |
| 28. Family thought I was spending most of the time in breastfeeding and avoiding household chores | | | |

**ANNEXURE 3**
**DATA COLLECTION TOOL (HINDI)**

नर्सिंग महाविद्यालय, एम्स भोपाल
NURSING COLLEGE, AIIMS BHOPAL

## स्क्रीनिंग उपकरण

1. मूल्यांकन की तिथि ……
2. बच्चों की संख्या ……
3. 3.सबसे छोटे बच्चे की उम्र (वर्षों में) ……
4. क्या आपको अपने सबसे छोटे बच्चे में विशेष स्तनपान का समय याद है
हाँ / नहीं
5. क्या आपके बच्चे को पहले से कोई जन्मजात जन्म दोष था जैसे फांक (कटा) होंठ व तालू , टीईएफ और चयापचय संबंधी विकार (फेनिलकेटोनुरिया, गैलेक्टोसिमिया, लैक्टोज असहिष्णुता)?
[हां/ नहीं]
6. क्या आप हिंदी या अंग्रेजी समझने में सक्षम हैं? [हां /नहीं]
7. क्या आप अध्ययन में भाग लेने के इच्छुक हैं? [हां /नहीं]

**अध्ययन के लिए चुना गया** -
[ ] हाँ [ ] नहीं

1. कोड नं. ……

2. स्क्रीनिंग का स्थान ……..

# औजार

## औज़ारों का विवरण

उपकरण अनुसंधान शीर्षक से संबंधित साहित्य के आधार पर तैयार किया गया था। उपकरण को तीन वर्गों में विभाजित किया गया था। खंड ए के भाग ए में सामाजिक-जनसांख्यिकीय से संबंधित डेटा हैं, इसके बाद भाग बी में क्लिनिकल वेरिएबल हैं, खंड बी में अनन्य स्तनपान के प्रति गैर-अनुपालन का पता लगाने के लिए प्रश्नावली शामिल है और खंड सी में ऐसे कथन शामिल हैं जो अनन्य स्तनपान में बाधा डालने वाले विभिन्न कारकों की पड़ताल करते हैं।

## खंड ए: सामाजिक जनसांख्यिकी और नैदानिक डेटा

सामाजिक-सांस्कृतिक डेटा में भाग 1 में मां और बच्चे की जानकारी है और भाग 2 में नैदानिक डेटा है।

**निर्देश:** कृपया प्रत्येक आइटम के लिए सबसे उपयुक्त उत्तर पर (✓) निशान लगाएं। आपके द्वारा प्रदान की गई जानकारी गोपनीय रखी जाएगी और इसका उपयोग केवल शोध उद्देश्य के लिए किया जाएगा।

## भाग ए- मां और बच्चे की जानकारी

## माँ की जानकारी:

1) माँ की उम्र (वर्षों में)
क) 18-22 वर्ष
ख) 22-27 वर्ष
ग) 27-32 वर्ष
घ) >32 वर्ष

2) वैवाहिक स्थिति
क) विवाहित
ख) विधवा
ग) तलाकशुदा

3) धर्म
क) हिंदू
बी) मुस्लिम
ग) ईसाई
घ) अन्य (निर्दिष्ट करें) ----------

4) माँ की शिक्षा
क) व्यावसायिक डिग्री
ख) स्नातक
ग) डिप्लोमा
घ) उच्च शिक्षा
ई) माध्यमिक शिक्षा
च) प्राथमिक शिक्षा
छ) अशिक्षित

5) पति की शिक्षा
क) व्यावसायिक डिग्री
ख) स्नातक
ग) डिप्लोमा
घ) उच्च शिक्षा
ई) माध्यमिक शिक्षा
च) प्राथमिक शिक्षा
छ) अनपढ़

6) माँ का व्यवसाय
क) गृहिणी
बी) सरकारी कर्मचारी
ग) निजी कर्मचारी
घ) श्रमिक वर्ग / मजदूर
ई)स्वरोजगार
च) बेरोजगार

7) पति का व्यवसाय
क) सरकारी कर्मचारी
बी) निजी कर्मचारी
ग) श्रमिक वर्ग / मजदूर
घ) स्व-रोज़गार
ई) बेरोजगार

8) आवासीय क्षेत्र
क) शहरी
बी) अर्ध-शहरी
ग) ग्रामीण
घ) मलिन बस्ती

9) परिवार का प्रकार
क) एकल परिवार
ख) विस्तारित परिवार

10) जीवित बच्चों की संख्या
ए) 1
बी) 2
ग) 3
घ) >3

11. परिवार की कुल मासिक आय (सामाजिक-आर्थिक स्थिति के पैमाने के अनुसार) कुप्पुस्वामी)
a) 185,895 के बराबर या उससे अधिक
बी) 92,951 - 185,894
ग) 69,535 - 92,950
घ) 46,475 - 69,534
ई) 27883 - 46474
च) 9208 - 27882
ई) 9307 से कम या उसके बराबर

**बच्चे की जानकारी**

12. बच्चे की उम्र
ए) 6 महीने -1 वर्ष
बी) >1 वर्ष- 1.5 वर्ष
ग) >1.5 वर्ष-2 वर्ष

13. बच्चे का लिंग
ए) पुरुष
बी) महिला
ग) ट्रांसजेंडर

14. जन्म के समय बच्चे का वजन (किलो में)
ए) 1- 1.5 किलोग्राम
बी) 1.6- 2 किलोग्राम
ग) 2.1-2.5 किलोग्राम
घ) >2.5 किलोग्राम

## भाग - बी: क्लिनिकल वेरिएबल

**प्रतिभागियों के लिए निर्देश:** कृपया साइड में दिए गए बॉक्स में अपनी पसंद के विकल्प पर (√) निशान लगाएं।

15. गर्भावस्था ।
क) योजनाबद्ध
ख) अनियोजित

16. क्या आपने सभी कोई एएनसी विजिट ली थी ।
क) जी हां
ख) नहीं

17. क्या आपने अपनी पिछली गर्भावस्था में जुड़वा बच्चों को जन्म दिया था?
क) हाँ
ख) नहीं

18. डिलीवरी का प्रकार
क) सामान्य डिलीवरी
बी) वाद्य वितरण
ग) सिजेरियन डिलीवरी

19. प्रसव का स्थान
ए) तृतीयक देखभाल अस्पताल
ख) सामुदायिक स्वास्थ्य केंद्र
ग) उप-केंद्र या पीएचसी
घ) घर

20. प्रसव के समय गर्भधारण की आयु
a) गर्भधारण के 37 सप्ताह से कम
बी) गर्भधारण के 37-42 सप्ताह के भीतर
ग) 42 सप्ताह से अधिक का गर्भाधान
घ) याद नहीं है

21. समता की स्थिति
क) प्रिमिपेरा
ख) मल्टीपेरा

22. प्रसव के बाद स्तनपान शुरू करने का समय
a) 1 घंटे के भीतर
b) 1 घंटा- 2 घंटा
ग) 2 घंटे- 3 घंटा
d) 3 घंटे से अधिक

**खंड बी: अनन्य स्तनपान के प्रति गैर-अनुपालन का पता लगाने के लिए प्रश्नावली।**
**प्रतिभागियों के लिए निर्देश:** कृपया साइड में दिए गए बॉक्स में अपनी पसंद के विकल्प पर टिक (√) करें।

क्या आपने अपने बच्चे को 6 महीने तक केवल स्तन या व्यक्त स्तन का दूध प्रदान किया और कोई अतिरिक्त भोजन, पेय और शहद नहीं दिया (विटामिन, खनिज की खुराक या दवाओं से युक्त सिरप की बूंद के अपवाद के साथ)।

हाँ ☐

नहीं ☐

**खंड सी: विशेष स्तनपान में बाधा डालने वाले कारकों पर बयान।**

**प्रतिभागियों के लिए निर्देश:** कृपया बॉक्स में एक टिक मार्क (√) रखकर 0 से 2 के पैमाने पर निम्नलिखित कथनों को रेट करें, जो आपके अनुसार उपयुक्त है।

**0-असहमत, 1-सहमत, 2-पूरी तरह सहमत**

| कथन | असहमत | सहमत | पूरी तरह सहमत |
|---|---|---|---|
| **मातृ कारक** | | | |
| 1. मैं बहुत कमज़ोर थी क्योंकि मैं उचित पोषण नहीं ले रही थी, इसलिए मैंने स्तनपान कराना छोड़ दिया। | | | |
| 2. बच्चे को दूध पिलाते समय मुझे पीठ में दर्द होता था। | | | |
| 3. दूध पिलाते समय मुझे स्तन में दर्द होता था। | | | |
| 4. मेरे उल्टे और पीड़ादायक निपल के कारण दूध पिलाने में कठिनाई होती थी। | | | |
| 5. मेरे उल्टे और पीड़ादायक निपल के कारण दूध पिलाने में कठिनाई होती थी। | | | |
| 6. मुझे दूध की कमी हो रही थी | | | |
| 7. बार-बार स्तनपान कराने से नींद में बाधा आने के कारण मैंने स्तनपान बंद कर दिया। | | | |
| 8. मुझे स्तनपान बंद करना पड़ा क्योंकि मुझे काम पर जाना होता था। | | | |
| 9. शुरुआत में मैं बार-बार स्तनपान कराती थी जिसके कारण मैं बाहर नहीं जा पाती थी। इसलिए मैंने जल्दी स्तनपान कराना छोड़ दिया। | | | |
| 10. मुझे केवल स्तनपान के बारे में पर्याप्त जानकारी नहीं थी/मुझे जानकारी नहीं थी। | | | |
| 11. मैं बहुत चिंतित थी क्योंकि यह मेरा पहला बच्चा था, जिससे मुझे स्तनपान कराने में बाधा आ रही थी। | | | |
| 12. मैंने स्तनपान बंद कर दिया क्योंकि मुझे लगा कि इससे स्तन ढीले हो सकते हैं, जिससे मेरी शारीरिक छवि खराब हो सकती है। | | | |
| 13. मुझे लगा कि स्तनपान के साथ-साथ ऊपरी आहार मेरे बच्चे को अधिक पोषक तत्व और ऊर्जा प्रदान करेगा। | | | |

| | | | |
|---|---|---|---|
| **शिशु कारक** | | | |
| 14. बच्चा मुंह से स्तन को ठीक से पकड़ने व चूसने में सक्षम नहीं था। | | | |
| 15. बार-बार स्तनपान कराने के बाद भी शिशु रो रहा था, जिसके कारण मुझे अतिरिक्त आहार का उपयोग करना पड़ा | | | |
| 16. मेरा बच्चा हर बार दूध पीने के बाद उल्टी करता था/पाचन संबंधी समस्या थी | | | |
| 17. मेरा बच्चा मुझसे अलग हो गया था, एनआईसीयू में/दादा-दादी के साथ था | | | |
| 18. बच्चे का वजन नहीं बढ़ रहा था इसलिए मैंने ऊपरी आहार शुरू कर दिया | | | |
| 19. बच्चा रात को सो नहीं रहा था इसलिए मैंने उसे शांत करने के लिए ऊपरी आहार दिया | | | |
| **सामाजिक-सांस्कृतिक कारक** | | | |
| 20. मेरे दोस्तों/परिवार ने मुझे 6 महीने से पहले अतिरिक्त आहार शुरू करने की सलाह दी। | | | |
| 21. मुझे प्रसव के बाद अस्पताल के कर्मचारियों द्वारा विशेष स्तनपान की सलाह नहीं दी गई थी। | | | |
| 22. मुझे अपने पति और परिवार के सदस्यों से प्रोत्साहन की कमी थी। | | | |
| 23. कोलोस्ट्रम "ख़राब दूध" है इसलिए शुरुआत में बच्चे को ऊपरी आहार देना ज़रूरी है। | | | |
| 24. सार्वजनिक स्थानों पर स्तनपान कराना शर्मनाक है और हमारे समाज द्वारा इसे स्वीकार नहीं किया जाता है। | | | |
| 25. . कुछ पारिवारिक विवादों या संकटों के कारण मैं कुछ दिनों तक अपने बच्चे को स्तनपान नहीं करा सकी । | | | |
| 26. घर पर गाय का दूध आसानी से उपलब्ध था इसलिए मैंने शिशु को गाय का दूध दिया। | | | |
| 27. मेरे अनुसार फॉर्मूला दूध अधिक पोषक है और बच्चे की वृद्धि और विकास के लिए अच्छा है, जैसा कि एडवर्टिस्मेंट में देखा गया है। | | | |
| 28. परिवार को लगा कि मैं ज्यादातर समय स्तनपान कराने में बिता रही हूं, जिसके कारण मैं घर का काम नहीं कर पाति । | | | |

**ANNEXURE 4**

**LIST OF EXPERTS FOR CONTENT VALIDITY**

| SR. No | NAMEOF EXPERT | DEPARTEMENT AND DESIGNATION |
|---|---|---|
| 1. | Dr. Priya Gogia | Assistant Professor, Dept. of Paediatrics Medicine, AIIMS Bhopal |
| 2. | Dr. Girish Chandar Bhatt | Additional Professor, Dept. of Paediatrics Medicine, AIIMS Bhopal |
| 3. | Dr. Yogendra Singh Yadav | Associate Professor, Dept. of Paediatric Medicine, AIIMS Bhopal |
| 4. | Dr.Mahesh Maheswari | Professor, Dept. of Paediatrics Medicine, AIIMS Bhopal |
| 5. | Dr. Reyaz Ahmad | Additional Professor, Dept. of Paediatric Surgery, AIIMS Bhopal |
| 6. | Dr. Malar Kodis | Assistant Professor, Child Health Nursing, AIIMS Rishikesh |
| 7. | Dr. Amit Gupta | Additional Professor, Dept. of Paediatric Surgery , AIIMS Bhopal |
| 8. | Dr. Parul Dutta | Former Principal Nursing Officer, Vice President of Indian Association of Neonatal Nurses. |
| 9. | Dr. Pankaj | Associate Professor, Community and family medicine, AIIMS Bhopal |
| 10. | Dr. Varsha Varghese | Assistant Professor , St. Stephen's College of Nursing, New Delhi |

# ANNEXURE 5

# LETTER REQUESTING EXPERTS' OPINION AND SUGGESTIONS FOR THE CONTENT VALIDITY OF TOOL

LETTER REQUESTING EXPERTS OPINION AND SUGGESTIONS FOR THE CONTENT VALIDITY OF RESEARCH TOOL

Date :

From,

Priya Kadiyan

M.Sc. Nursing (Batch 2022-24)

Nursing college, AIIMS Bhopal.

To,

.....

.....

**Subject :** Requesting the expert's opinion and suggestion for the content validity of research tool

Respected Sir/ Madam,

I, Priya Kadiyan , M.Sc. Nursing (Batch 2022-24) student in Pediatric (-Child Health Nursing) at Nursing College of AIIMS Bhopal. I have selected the topic mentioned below for my dissertation to be submitted as partial fulfillment of Masters in Nursing Degree programme, at the nursing college, AIIMS Bhopal.

**Title of the study : "To assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital , Bhopal , Madhya Pradesh"**

In this regard I have prepared the following:

1. Self Structured tool for data collection in English
2. Self Structured tool for data collection in Hindi

Kindly go through the tool and give your valuable remarks and suggestion for any modification needed in the content.

I shall be grateful to you for your valuable remarks and suggestion.

Thanking you.

**Enclosed with**

Brief synopsis, research tool, criteria checklist for content validity of the tool, certificate of validation.

**Your sincerely,**

Priya 11/9/23

**Priya Kadiyan**

**M.Sc. Nursing (Batch 2022-24)**

**GUIDE**

**Dr. Mamta Verma**
**Associate Professor & I/O Principle**
**College of Nursing, AIIMS Bhopal.**

11/9/23.

**CO-GUIDE**

**Mrs. Naseema Shafqat**
**Assistant Professor**
**College of Nursing, AIIMS Bhopal**

**ANNEXURE 6**

**CRITERIA CHECKLIST FOR THE VALIDATION OF THE TOOL**

CRITERIA CHECKLIST FOR THE VALIDATION OF THE TOOL :

Dear Experts,

This study consist Self structured tool, which consists of the following:
**SECTION A**- Socio-demographic data consists of part 1 and part 2 having mother and child information respectively.

**SECTION B**- Consists of clinical variable having 4 items.
**SECTION C**- Contain self-structured questionnaire to find out non-compliance towards exclusive breastfeeding.
**SECTION D**- Consist of statements on factors hindering exclusive Breastfeeding.

**SECTION A**- Socio-demographic data consists of part 1 and part 2 having mother and child information respectively.

- It consists of 11 and 3 items having mother and child information respectively.
- We need your expertise judgement on degree of relevancy of each item to the measure domain. If there is any suggestions and modifications please mention in the remark column.
- Your expert opinion and kind cooperation will be highly appreciated.

| Item number | Highly relevant | Quite relevant | Somewhat relevant | Not relevant | Remarks |
|---|---|---|---|---|---|
| Socio-demographic data PART A | | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |

| Socio-demographic data PART B | | | | | |
|---|---|---|---|---|---|
| Item number | Highly relevant | Quite relevant | Somewhat relevant | Not relevant | Remarks |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |

**SECTION B**- Consists of clinical variable having 4 items.

| Clinical Variable | | | | | |
|---|---|---|---|---|---|
| Item number | Highly relevant | Quite relevant | Somewhat relevant | Not relevant | Remarks |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |

**SECTION C**- Questionnaire to find out Non-Compliance towards Exclusive Breastfeeding.

| Item number | Highly Relevant | Quite relevant | Somewhat relevant | Not relevant | Remarks |
|---|---|---|---|---|---|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 3.1 | | | | | |
| 3.2 | | | | | |

**SECTION D**- Consist of statements on factors hindering exclusive breastfeeding.

| Statements on factors hindering exclusive breastfeeding. | | | | | |
|---|---|---|---|---|---|
| Item no. | Highly relevant | Quite relevant | Somewhat relevant | Not relevant | Remarks |
| 1. | | | | | |
| 2. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 3. | | | | | |
| 4. | | | | | |
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| 25. | | | | | |
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| 27. | | | | | |
| 28. | | | | | |
| 29. | | | | | |
| 30. | | | | | |

**ANNEXURE 7**
**CONTENT VALIDATION CERTIFICATE**

## CERTIFICATION OF VALIDATION

This is to certify that Questionnaire/Tool constructed by Priya Kadiyan, M.Sc. Nursing 2022-24 batch student, Nursing College, AIIMS Bhopal, to be used in her study titled - **" A descriptive study to assess the noncompliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh "** has been validated by me and is found to be valid/ appropriate with/without suggestion.

Overall Remark :

Signature:

Name of the Expert:
Designation:
Name of the Institution:
Official Seal:

Date:
Place:

**ANNEXURE 8**
**CERTIFICATE OF TRANSLATION (HINDI)**

# CERTIFICATE OF TRANSLATION

**TO WHOM IT MAY CONCERN**

This is to certify that Mrs. Priya Kadiyan, (Batch 2022-2024) M.Sc. Child health Nursing (Pediatric Nursing) student of Nursing College, AIIMS Bhopal is conducting research on topic ***"A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."*** The English version of Participant Information Sheet, Participant Informed Consent form ,Screening Tool , Sociodemographic Data and Content of Self structured Questionnaire for this study is a true and accurate translation of the Hindi version and is valid to collect data for research.

Seal & Signature: ..... Dr. Bhawna Pandey प्राध्यापक शासकीय म.ल.बा. कन्या स्नातकोत्तर स्वशासी महाविद्यालय भोपाल (म.प्र.)

Name of the language expert: Dr. Bhawna Pandey

Qualification: MA PhD

Designation: Professor

Name of the institute: Govt. MLB College, Bhopal

Date: 27.9.23

Place: Bhopal

**ANNEXURE 9**
**CERTIFICATE OF TRANSLATION (ENGLISH)**

# CERTIFICATE OF TRANSLATION

**TO WHOM IT MAY CONCERN**

This is to certify that Mrs. Priya Kadiyan, (Batch 2022-2024) M.Sc. Child health Nursing (Pediatric Nursing) student of Nursing College, AIIMS Bhopal is conducting research on topic ***"A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."*** The Hindi version of Participant Information Sheet, Participant Informed Consent Form, Screening Tool , Sociodemographic Data content of Self structured Questionnaire for this study is a true and accurate translation of the English version and is valid to collect data for research.

Seal & Signature: ..... प्राचार्या
शासकीय म.ल.बा. कन्या स्नातकोत्तर
स्वशासी महाविद्यालय भोपाल (म.प्र.)

Name of the language expert: Dr Deepa. S. Kumar

Qualification: Ph.D

Designation: Professor, Dept of English

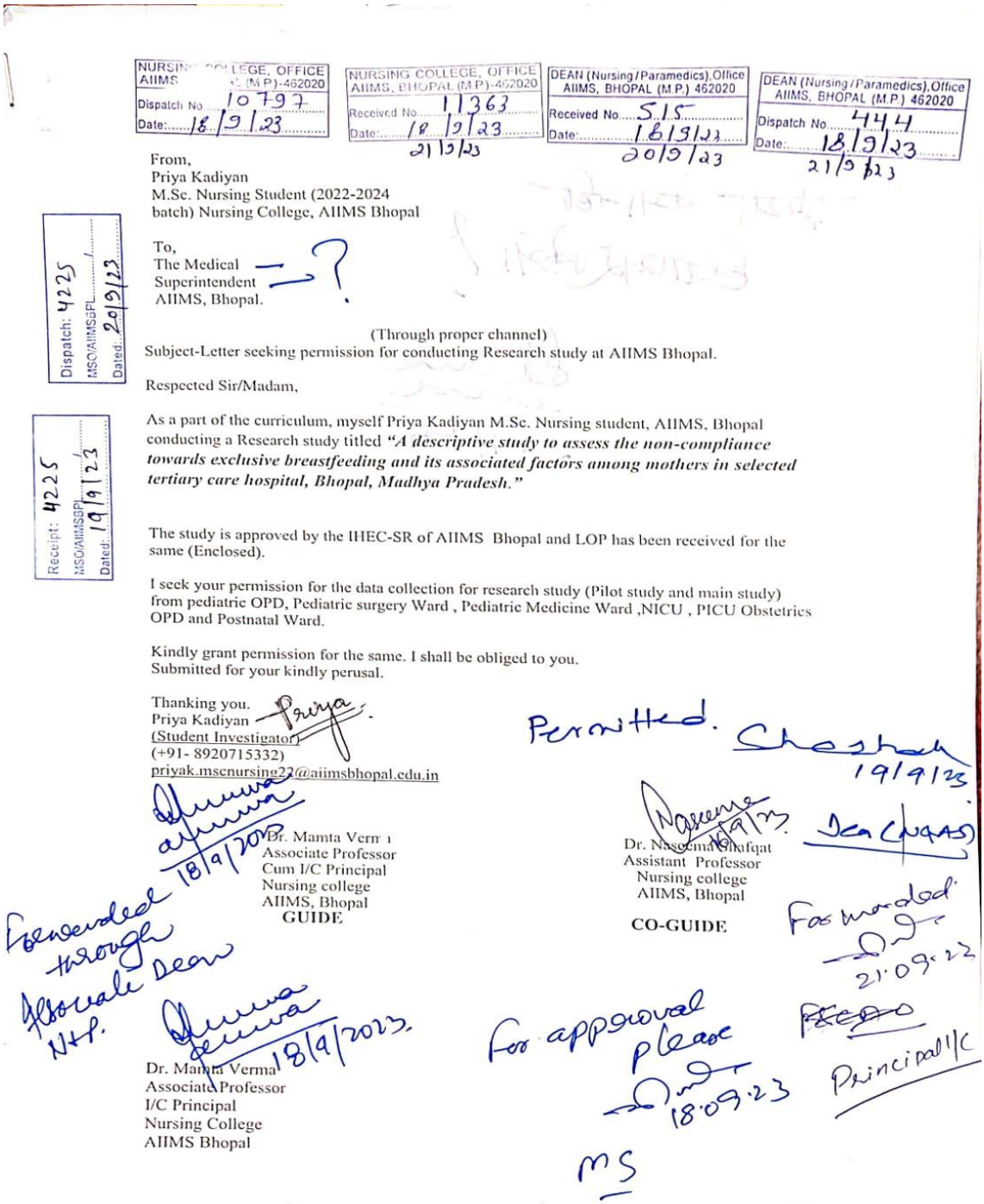
Name of the institute: Govt MLB Girls PG Autonomous College, Bhopal.

Date: 27-09-2023

Place: Bhopal.

## ANNEXURE 10

## LETTER SEEKING PERMISSION TO CONDUCT THE STUDY



NURSING COLLEGE, OFFICE AIIMS (M.P)-462020 Dispatch No. 10797 Date: 18/9/23

NURSING COLLEGE, OFFICE AIIMS, BHOPAL (M.P)-462020 Received No. 11363 Date: 18/9/23 21/9/23

DEAN (Nursing/Paramedics), Office AIIMS, BHOPAL (M.P.) 462020 Received No. 515 Date: 18/9/23 20/9/23

DEAN (Nursing/Paramedics), Office AIIMS, BHOPAL (M.P.) 462020 Dispatch No. 444 Date: 18/9/23 21/9/23

From,
Priya Kadiyan
M.Sc. Nursing Student (2022-2024 batch) Nursing College, AIIMS Bhopal

Dispatch: 4225 MSO/AIIMSBPL Dated: 20/9/23

To,
The Medical Superintendent
AIIMS, Bhopal.

(Through proper channel)

Subject-Letter seeking permission for conducting Research study at AIIMS Bhopal.

Respected Sir/Madam,

Receipt: 4225 MSO/AIIMSBPL Dated: 19/9/23

As a part of the curriculum, myself Priya Kadiyan M.Sc. Nursing student, AIIMS, Bhopal conducting a Research study titled ***"A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."***

The study is approved by the IHEC-SR of AIIMS Bhopal and LOP has been received for the same (Enclosed).

I seek your permission for the data collection for research study (Pilot study and main study) from pediatric OPD, Pediatric surgery Ward , Pediatric Medicine Ward ,NICU , PICU Obstetrics OPD and Postnatal Ward.

Kindly grant permission for the same. I shall be obliged to you.
Submitted for your kindly perusal.

Thanking you.
Priya Kadiyan
(Student Investigator)
(+91- 8920715332)
priyak.mscnursing22@aiimsbhopal.edu.in

Dr. Mamta Verma
Associate Professor
Cum I/C Principal
Nursing college
AIIMS, Bhopal
**GUIDE**

18/9/2023

Dr. Nasreena Shafqat
Assistant Professor
Nursing college
AIIMS, Bhopal
**CO-GUIDE**

Permitted. 19/9/23

Forwarded through Hon'ble Dean NTP.

Dr. Mamta Verma
Associate Professor
I/C Principal
Nursing College
AIIMS Bhopal

18/9/2023.

For approval please 18.09.23

Forwarded 21.09.23

Principal I/C

MS

## ANNEXURE 11

## PARTICIPANT INFORMATION SHEET (ENGLISH)

**Title of the study:**

"A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."

Dear sir/Madam,

Please read the following.

You are requested to participate in a study conducted by Ms. Priya Kadiyan M.Sc. Nursing (2022-2024 batch), Mrs. Mamta Verma, Associate Professor, Dept. of Pediatric Nursing, Nursing college, AIIMS Bhopal, Mrs. Naseema Shafqat ,Dept of Obstetrics and Gynaecology

**Introduction and Purpose of the study:**

Over two-thirds of deaths occurring worldwide during the first year of life of children are often associated with inappropriate feeding practices, especially due to poor exclusive breastfeeding practices. Although more than 80 % of neonate receive breast milk in nearly all countries, only about half begin breastfeeding within first hour of life, and rate of exclusive breastfeeding are well below 50% in most of the countries. The study will assess the that how many mothers follow non-adherence to exclusive breastfeeding and what are the factors related to it. Breastfeeding is highly imphasized in developing countries like India but still lot of women's shows non-compliance to exclusive breastfeeding. In India very few studies have been carried out in this area as compared to the other developing countries, which is making India the risk of higher mortality and morbidity rates in infants.

### Eligibility to participate in study

Those mothers are invited to participate in study whose child is in the age group of 6 months to 2 years.

**Procedure in the study:**

If you agree to participate in the study, after taking informed consent, some questions will be asked to you regarding your personal data and Breastfeeding practice followed by you which will not be disclosed to anyone.

**Potential risks involved:** Information provided by you will be strictly confidential and would not be used for any other purpose. You do not give up any of your legal rights on agreeing to participate in the study .

**Potential benefits involved in the study:**

This study may help mother's in knowing the benefits and importance of exclusive breastfeeding in children . There is no financial benefit involved in the study.

Expected number of participants

158 participants will be included the study. You will be one among them

**Confidentiality:**

Efforts may be made to keep your study-related information confidential. Instead of your name, this study uses a code so that your name will not be revealed.

**Incentive:**

Needed materials for the study will be arranged by the researcher. No other incentives will be offered for study participation.

**Contact and questions:**

For any question, concern, or complaint about this study, you may contact, Priya Kadiyan on *priyak.mscnursing22@aiimsbhopal.edu*or 8920715332.

**ANNEXURE 12**

**PARTICIPANT INFORMATION SHEET (HINDI)**

## प्रतिभागी सूचना पत्र

**अध्ययन का शीर्षक:**

"चयनित तृतीयक देखभाल अस्पताल, भोपाल, मध्य प्रदेश में माताओं के बीच विशेष स्तनपान और इसके संबंधित कारकों के प्रति गैर-अनुपालन का आकलन करने के लिए एक वर्णनात्मक अध्ययन।

प्रिय सर / मैडम,

कृपया निम्नलिखित पढ़ें।

आपसे अनुरोध है कि सुश्री प्रिया कादियान M.Sc नर्सिंग द्वारा किए गए एक अध्ययन में भाग लें।

(2022-2024 बैच), श्रीमती ममता वर्मा, एसोसिएट प्रोफेसर, बाल चिकित्सा नर्सिंग विभाग,

नर्सिंग कॉलेज, एम्स भोपाल, श्रीमती नसीमा शफकत, प्रसूति एवं स्त्री रोग विभाग

**अध्ययन का परिचय और उद्देश्य:**

बच्चों के जीवन के पहले वर्ष के दौरान दुनिया भर में होने वाली दो-तिहाई से अधिक मौतें अक्सर अनुचित भोजन प्रथाओं से जुड़ी होती हैं, खासकर खराब अनन्य स्तनपान प्रथाओं के कारण। यद्यपि लगभग सभी देशों में 80% से अधिक नवजात शिशुओं को स्तन का दूध प्राप्त होता है, केवल आधे ही जीवन के पहले घंटे के भीतर स्तनपान शुरू करते हैं, और अधिकांश देशों में विशेष स्तनपान की दर 50% से नीचे है। अध्ययन में इस बात का आकलन किया जाएगा कि कितनी माताएं अनन्य स्तनपान का पालन नहीं करती हैं और इससे संबंधित कारक क्या हैं। भारत जैसे विकासशील देशों में स्तनपान अत्यधिक महत्वपूर्ण है, लेकिन अभी भी बहुत सी महिलाओं में विशेष स्तनपान के लिए गैर-अनुपालन दिखाया गया है। अन्य विकासशील देशों की तुलना में भारत में इस क्षेत्र में बहुत कम अध्ययन किए गए हैं, जिससे भारत में शिशुओं में उच्च मृत्यु दर और रुग्णता दर का खतरा बढ़ रहा है।

**अध्ययन में भाग लेने के लिए पात्रता**

उन माताओं को अध्ययन में भाग लेने के लिए आमंत्रित किया जाता है जिनका बच्चा 6 महीने से 2 वर्ष के आयु वर्ग में है।

**अध्ययन में प्रक्रिया:**

यदि आप अध्ययन में भाग लेने के लिए सहमत हैं, तो सूचित सहमति लेने के बाद, आपसे आपके व्यक्तिगत डेटा और आपके द्वारा पालन किए जाने वाले स्तनपान अभ्यास के बारे में कुछ प्रश्न पूछे जाएंगे जो किसी को भी नहीं बताए जाएंगे।

**संभावित जोखिम शामिल हैं:** आपके द्वारा प्रदान की गई जानकारी सख्ती से गोपनीय होगी और किसी अन्य उद्देश्य के लिए उपयोग नहीं की जाएगी। अध्ययन में भाग लेने के लिए सहमत होने पर आप अपने किसी भी कानूनी अधिकार को नहीं छोड़ते हैं।

**अध्ययन में शामिल संभावित लाभ:**

यह अध्ययन बच्चों में विशेष स्तनपान के लाभों और महत्व को जानने में मां की मदद कर सकता है। अध्ययन में कोई वित्तीय लाभ शामिल नहीं है।

**प्रतिभागियों की अपेक्षित संख्या**

अध्ययन में 158 प्रतिभागियों को शामिल किया जाएगा। आप उनमें से एक होंगे।

**गोपनीयता:**

अपनी पढ़ाई से जुड़ी जानकारी गोपनीय रखने का प्रयास किया जा सकता है। आपके नाम के बजाय, यह अध्ययन एक कोड का उपयोग करता है ताकि आपका नाम प्रकट न हो।

**प्रेरणादायक:**

अध्ययन के लिए आवश्यक सामग्री शोधकर्ता द्वारा व्यवस्थित की जाएगी। अध्ययन भागीदारी के लिए कोई अन्य प्रोत्साहन नहीं दिया जाएगा।

**संपर्क और प्रश्न:**

इस अध्ययन के बारे में किसी भी प्रश्न, चिंता या शिकायत के लिए, आप priyak.mscnursing22@aiimsbhopal.edu.in or 8920715332 पर प्रिया कादियान से संपर्क कर सकते हैं।

**ANNEXURE 13**
**INFORMED CONSENT SHEET**

## प्रतिभागी सूचना सहमति प्रपत्र
## Participant Informed Consent Form (PICF)

**इस अध्ययन के लिए प्रतिभागी का पहचान नंबरः .....**
Participant Identification no for this study:……..

**अनुसंधान का शीर्षकः**
"विशेष स्तनपान के प्रति गैर-अनुपालन का आकलन करने के लिए एक वर्णनात्मक अध्ययन और चयनित तृतीयक देखभाल अस्पताल, भोपाल, मध्य प्रदेश में माताओं के बीच इसके संबंधित कारक।

Title of the study: - "A descriptive study to assess the non-compliance towards exclusive breastfeeding and its associated factors among mothers in selected tertiary care hospital, Bhopal, Madhya Pradesh."

**शोधकर्ता छात्र का नाम:** प्रिया कादियान **फोन नं**: 8920715332
Name of the Principal Investigator: Mrs. Priya Kadiyan Mobile No- 8920715332

**शोध मार्गदर्शक का नाम :** डॉ ममता वर्मा, पीडियाट्रिक नर्सिंग, एसोसिएट प्रोफेसर, एम्स, भोपाल
**Name of thesis Guide:** Dr. Mamta Verma, Pediatric nursing, Associate Professor, Nursing College, AIIMS Bhopal.

**थीसिस सह-गाइड का नाम:** डॉ नसीमा शफकत, सहायक प्रोफेसर, प्रसूति एवं स्त्री रोग विभाग, नर्सिंग कॉलेज, एम्स भोपाल
**Name of the thesis Co-Guide:** Dr. Naseema Shafqat, , Assistant Professor, Dept of Obstetrics and Gynaecology ,Nursing College ,AIIMS Bhopal.

मैंने दिनांक 20.07.2022 के सूचना पत्रक संस्करण II में दिए गए सभी तथ्यों को सावधानीपूर्वक पढ़ लिया है/ मुझे अपनी भाषा में स्पष्ट रूप से विस्तारपूर्वक समझा दिया गया है ,और मैंने तथ्यों को पूर्णतः समझ लिया है।
मैं पुष्टि करता/करती हूँ, कि मुझे सवाल पूछने के अवसर प्रदान किए गए।

The content of the information sheet version II dated 20.07.2022 has been provided, have been read carefully by me/explained in detail to me, in a language that I comprehend, and I have fully understood the content.
I confirm that I have had the opportunity to ask questions.

मुझे इस अध्ययन की प्रकृति एवं उद्देश्य और इसके संभावित जोखिमों / लाभों तथा अध्ययन की अनुमानित अवधि एवं अन्य प्रासंगिक जानकारी के बारे में विस्तारपूर्वक समझा दिया गया है। है। मुझे पता है कि इस अध्ययन में मेरी भागीदारी स्वैच्छिक है तथा मैं इस अध्ययन से किसी भी समय बिना कोई कारण बताए, अपना नाम वापस लेने के लिए स्वतंत्र हूं और नाम वापस लेने पर मेरी चिकित्सा देखभाल या कानूनी अधिकारों पर कोई प्रभाव नहीं पड़ेगा।

The nature and the purpose of the study and potential risks/benefits and expected duration of the study, and other relevant details of the study have been explained to me in detail. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason,without my medical care or legal right being affected.

मैं समझता/समझती हूं कि इस अनुसंधान में मेरी भागीदारी से मेरे बारे में एकत्र की गई जानकारी और मेरे चिकित्सीय दस्तावेजों के किसी भी भाग को एम्स के जिम्मेदार व्यक्तियों द्वारा ही देखा जाएगा। मैं इन व्यक्तियों को मेरे रिकॉर्ड प्राप्त करने की अनुमति प्रदान करता/ करती हूँ।यदि प्रतिभागी बच्चा है तो उसकी मौखिक या लिखित सहमति प्राप्त की गई है।

I understand the information collected about me from my participation in this research and sectionsof any of my medical notes may be looked at by responsible individuals from AIIMS, Bhopal. I amgiving my permission for these individuals to have access to my records.

If participant is child, his/her verbal of written assent has -been obtained.

मैं उक्त अध्ययन में भाग लेने के लिए सहमत हूं

I agree to take part in this study.

दिनांक……

Date:

स्थान…….....

Place:

(प्रतिभागी के हस्ताक्षर / बांए अंगूठे का निशान)

(Signature/ left thumb impression)

प्रतिभागी का नाम

Name of the participant:

पिता/पति/पत्नी का नाम……

Son/daughter/Spouse of:

डाक का पूरा पता.....

Complete postal address:

अगर अशिक्षित हों
सूचना पत्र को प्रतिभागी को पढ़ा और समझाया गया है और प्रश्न पूछने का अवसर दिया गया है। मैं पुष्टि करता हूं कि व्यक्ति ने स्वतंत्र रूप से अपनी सहमति दी है ।

If illiterate

The information sheet has been read and explained to the participant and given the opportunity to ask questions. I confirm that the individual has given consent freely.

कानूनी रूप से स्वीकार्य प्रतिनिधि या निष्पक्ष गवाह के हस्ताक्षर

Signature of legally acceptable representative or impartial witness.

एलएआर या निष्पक्ष गवाह का नाम:
Name of LAR or impartial witness:

पता .....
Address:……

प्रमाणित किया जाता है कि उक्त सहमति मेरी उपस्थिति में प्राप्त की गई ।
This is to certify that the above consent has been obtained in my presence.

| | | |
|---|---|---|
| छात्र शोधकर्ता के हस्ताक्षर | दिनांक..... | स्थान..... |
| Signature of the Student Investigator: | Date: | Place: |